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A

YEAR'S RESIDENCE

IN THE

UNITED STATES OF AMERICA;

TREATING OF THE FACE OF THE COUNTRY, THE CLIMATE, THE SOIL, THE PRODUCTS, THE MODE OF CULTIVATING THE LAND, THE PRICES OF LAND, OF LABOUR, OF FOOD, OF RAIMENT; OF THE EXPENSES OF HOUSE-KEEPING AND OF THE USUAL MANNER OF LIVING; OF THE MANNERS AND CUSTOMS OF THE PEOPLE; AND, OF THE INSTITUTIONS OF THE COUNTRY, CIVIL, POLITICAL AND RELIGIOUS.

IN THREE PARTS.

BY WILLIAM COBBETT. 1762-1835

PART I.

CONTAINING, I. A DESCRIPTION OF THE FACE OF THE COUNTRY, THE CLIMATE, THE SEASONS AND THE SOIL; THE FACTS BEING TAKEN FROM THE AUTHOR'S DAILY NOTES DURING A WHOLE YEAR. II. AN ACCOUNT OF THE AUTHOR'S AGRICULTURAL EXPERIMENTS IN THE CULTIVATION OF THE RUTA BAGA, OR RUSSIA, OR SWEDISH, TURNIP, WHICH AFFORD PROOF OF WHAT THE CLIMATE AND SOIL ARE.

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1818.

SOUTHERN DISTRICT OF NEW-YORK, ss.

(L. S.) BE IT REMEMBERED, That on the sixth day of June, in the forty-second year of the Independence of the United States of America, WILLIAM COBBETT, of the said District, has deposited in this office the title of a book, the right whereof he claims as proprietor in the words following, to wit:

"*A Year's Residence in the United States of America; treating of the Face of the Country, the Soil, the Products, the Mode of Cultivating the Land, the Prices of Land, of Labour, of Food, of Raiment; of the Expenses of House-keeping, and of the usual manner of Living; of the Manners and Customs of the People; and, of the Institutions of the Country, Civil, Political and Religious. In three Parts. By William Cobbett. Part* I. *Containing,* I. *A Description of the Face of the Country, the Climate, the Seasons and the Soil, the Facts being taken from the Author's daily Notes during a whole Year.* II. *An Account of the Author's Agricultural Experiments in the Cultivation of the Ruta Baga, or Russia, or Swedish, Turnip, which afford proof of what the Climate and Soil are.*"

In conformity to the Act of the Congress of the United States, entitled "An Act for the encouragement of Learning, by securing the copies of Maps, Charts, and Books to the authors and proprietors of such copies, during the time therein mentioned." And also to an Act, entitled "an Act, supplementary to an Act, entitled an Act for the encouragement of Learning, by securing the copies of Maps, Charts, and Books to the authors and proprietors of such copies, during the times therein mentioned, and extending the benefits thereof to the arts of designing, engraving, and etching historical and other prints."

JAMES DILL,
Clerk of the Southern District of New-York.

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GENERAL PREFACE

TO THE

THREE PARTS.

1. THROUGHOUT the whole of this work it is my intention to *number* the paragraphs, from *one* to the *end* of each PART. This renders the business of *reference* more easy than it can be rendered by any mode in my power to find out; and, easy reference saves a great deal of paper and print, and also, which ought to be more valuable, a great deal of *time*, of which an industrious man has never any to spare. To desire the reader to look at paragraph *such a number* of *such a part*, will frequently, as he will find, save him both money and labour; for without this power of reference, the paragraph, or the substance of it, would demand being repeated in the place, where the reference would be pointed out to him.

2. Amongst all the publications, which I have yet seen on the subject of the United States, as a country to live in, and especially to *farm* in, I have never yet observed one that conveyed to Englishmen any thing like a correct notion of the matter. Some writers of *Travels* in these States have jolted along in the stages from place to place, have lounged away their time with the idle part of their own countrymen, and, taking every thing different from what they left at home for the effect of ignorance, and every thing not servile to be the effect of insolence, have described the country as unfit for a civilized being to reside in. Others, coming with

a resolution to find *every thing* better than at home, and weakly deeming themselves pledged to find climate, soil and all blessed by the effects of freedom, have painted the country as a perfect paradise; they have seen nothing but blooming orchards and smiling faces.

3. The account, which I shall give, shall be that of actual *experience*. I will say what I *know* and what I have *seen* and what I have *done*. I mean to give an account of a YEAR'S RESIDENCE, ten months in this Island and two months in Pennsylvania, in which I went back to the first ridge of mountains. In the course of the THREE PARTS, of which this work will consist, each part making a small volume, every thing which appears to me useful to persons intending to come to this country shall be communicated; but more especially that which may be useful to *farmers;* because, as to such matters, I have ample experience. Indeed, this is the *main thing;* for this is really and truly a *country of farmers*. Here Governors, Legislators, Presidents, all are farmers. A farmer here is not the poor dependent wretch that a Yeomanry-Cavalry man is, or that a Treason-Jury man is. A farmer here depends on nobody but *himself* and on his own proper means; and, if he be not at his ease, and even rich, it must be his own fault.

4. To make men clearly see what they may do in any situation of life, one of the best modes, if not the very best is, to give them, in detail, an account of what one has done one's-self in that same situation, and how and when and where one has done it. This, as far as relates to *farming*, and house keeping in the country, is the mode that I shall pursue. I shall give an account of what I have done; and, while this will convince any good farmer, or any man of tolerable means, that *he* may, if he will, do the same, it will give him an idea of the climate, soil, crops, &c. a thousand times more neat and

correct than could be conveyed to his mind by any general description unaccompanied with actual experimental accounts.

5. As the expressing of this intention may, perhaps, suggest to the reader to ask, how it is that much can be known on the subject of *Farming* by a man, who, for *thirty-six* out of *fifty-two* years of his life has been a *Soldier or a Political Writer*, and who, of course, has spent so large a part of his time in garrisons and in great cities, I will beg leave to satisfy this natural curiosity before-hand.

6. Early habits and affections seldom quit us while we have vigour of mind left. I was brought up under a father whose talk was chiefly about his garden and his fields, with regard to which he was famed for his skill and his exemplary neatness. From my very infancy, from the age of six years, when I climbed up the side of a steep sand rock, and there scooped me out a plot four feet square to make me a garden, and the soil for which I carried up in the bosom of my little blue smock-frock, or hunting shirt, I have never lost one particle of my passion for these healthy and rational and heart-cheering pursuits, in which every day presents something new, in which the spirits are never suffered to flag, and in which, industry, skill and care are sure to meet with their due reward. I have never, for any eight months together, during my whole life, been without a garden. So sure are we to overcome difficulties where the heart and mind are bent on the thing to be obtained!

7. The beautiful plantation of *American Trees* round my house at Botley, the seeds of which were sent me, at my request, from Pennsylvania, in 1806, and some of which are now *nearly forty feet high*, all sown and planted by myself, will, I hope, long remain as a specimen of my perseverance in this way. During my whole life I have been a *gardener*. There is no part of the busi-

ness, which, first or last, I have not performed with my own hands. And, as to *it*, I owe very little to *books*, except to that of TULL; for I never read a good one in my life, except a French book, called the *Manuel du Jardinier*.

8. As to *farming*, I was bred at the plough-tail, and in the Hop-Gardens of Farnham in Surrey, my native place, and which spot, as it so happened, is the neatest in England, and, I believe, in the whole world. All there is a garden. The neat culture of the hop extends its influence to the fields round about. Hedges cut with sheers and every other mark of skill and care strike the eye at Farnham, and become fainter and fainter as you go from it in every direction. I have had, besides, great experience in farming for several years of late; for, one man will gain more knowledge in a year than another will in a life. It is the *taste* for the thing that really gives the knowledge.

9. To this taste, produced in me by a desire to imitate a father, whom I ardently loved, and to whose every word I listened with admiration, I owe no small part of my happiness, for a greater portion of which very few men ever had to be grateful to God. These pursuits, innocent in themselves, instructive in their very nature, and always tending to preserve health, have been a constant, a never-failing source, of recreation with me; and, which I count amongst the greatest of their benefits and blessings, they have always, in my house, supplied the place of the card-table, the dice-box, the chess-board and the lounging bottle. Time never hangs on the hands of him, who delights in these pursuits, and who has books on the subject to read. Even when shut up within the walls of a prison for having complained that Englishmen had been flogged in the heart of England under a guard of German Bayonets and Sabres; even then, I found in these pursuits a

source of pleasure inexhaustible. To that of the whole of our English books on these matters I then added the reading of all the valuable French Books; and I then, for the first time, read that Book of all Books on Husbandry, the work of JETHRO TULL, to the principles of whom I owe more than to all my other reading and all my experience, and of which principles I hope to find time to give a sketch, at least, in some future PART of this work.

10. I wish it to be observed, that, in any thing which I may say, during the course of this work, though *truth* will compel me to state facts, which will, doubtless, tend to induce farmers to leave England for America, I *advise* no one so to do. I shall set down in writing nothing but what is *strictly true.* I myself am bound to England for life. My notions of allegiance to country; my great and anxious desire to assist in the restoration of her freedom and happiness; my opinion that I possess, in some small degree, at any rate, the power to render such assistance; and, above all other considerations, my unchangeable attachment to the people of England, and especially those who have so bravely struggled for our rights: these bind me to England; but, I shall leave others to judge and to act for themselves.

WM. COBBETT.

North Hempstead, Long Island, 21 *April,* 1818.

A

YEAR'S RESIDENCE, &c.

CHAP. I.

Description of the Situation, and Extent of Long Island, and also of the Face of the Country, and an account of the Climate, Seasons and Soil.

11. LONG ISLAND is situated in what may be called the *middle* climate of that part of the United States, which, coast wise, extends from Boston to the Bay of Chesapeake. Farther to the South the cultivation is chiefly by negroes, and farther to the north than Boston is too cold and arid to be worth much notice, though, doubtless, there are to be found in those parts good spots of land and good farmers. Boston is about 200 miles to the North of me, and the Bay of Chesapeake about the same distance to the South. In speaking of the *climate* and *seasons*, therefore, an allowance must be made, of hotter or colder, earlier or later, in a degree proportioned to those distances; because I can speak positively only of the very spot, at which I have resided. But, this is a matter of very little consequence; seeing that every part has its seasons first or last. All the difference is, that, in some parts of the immense space of which I have spoken, there is a little more summer than in other parts. The same crops will, I believe, grow in them all.

12. The situation of Long Island is this: it is about 130 miles long, and, on an average about 8 miles broad. It extends in length from the Bay of the City of New-York to within a short distance of the State of Rhode Island. One side of it is against the sea, the other side looks across an arm of the sea into a part of the State of New-York (to which Long Island belongs) and into a part of the State of Connecticut. At the end nearest the city of New-York it is separated from the site of that city by a channel so narrow as to be crossed by a Steam-Boat in a few minutes; and this boat, with another near it, impelled by a team of horses, which work in the boat, form the mode of conveyance from the Island to the city, for horses, wagons, and every thing else.

13. The Island is divided into three counties, King's county, Queen's county, and the county of Suffolk. King's county takes off the end next New-York city for about 13 miles up the Island; Queen's county cuts off another slice about thirty miles further up; and all the rest is the county of Suffolk. These counties are divided into townships. And, the municipal government of Justices of the Peace, Sheriffs, Constables, &c. is in nearly the English way, with such differences as I shall notice in the *Second Part* of this work.

14. There is a *ridge of hills* which runs from one end of the Island to the other. The two sides are flats, or, rather, very easy and imperceptible slopes towards the sea. There are no rivers, or rivulets, except here and there a little run into a bottom which lets in the sea water for a mile or two as it were to meet the springs. *Dryness* is, therefore, a great characteristic of this Island. At the place where I live, which is in Queen's county, and very nearly the middle of the Island, crosswise, we have no water, except in a well seventy feet deep, and from the clouds; yet, we never ex-

perience a want of water. A large rain water cistern to take the run from the house, and a duck pond to take that from the barn, afford an ample supply; and, I can truly say, that, as to the article of water, I never was situated to please me so well in my life before. The rains come about once in fifteen days; they come in abundance for about twenty-four hours; and then all is fair and all is dry again immediately. Yet here and there, especially *on the hills*, there are *ponds*, as they call them here; but, in England, they would be called *lakes* from their extent as well as from their depth. These, with the various trees which surround them, are very beautiful indeed.

15. The *farms* are so many plots originally scooped out of woods; though in King's and Queen's counties the land is generally pretty much deprived of the woods, which, as in every other part of America that I have seen, are beautiful beyond all description. The Walnut of two or three sorts; the Plane; the Hickory, Chestnut, Tulip Tree, Cedar, Sassafras, Wild Cherry (sometimes 60 feet high); more than fifty sorts of Oaks; and many other trees, but especially the Flowering Locust, or Accasia, which, in my opinion, surpasses all other trees, and some of which, in this Island, are of a very great height and girt. The orchards constitute a feature of great beauty. Every farm has its orchard, and, in general, of cherries as well as of apples and pears. Of the cultivation and crops of these, I shall speak in another Part of the work.

16. There is one great draw-back to all these beauties; namely, the *fences;* and, indeed, there is another with us South of England people; namely, the general (for there are many exceptions) slovenliness about the homesteads and particularly about the *dwellings of labourers.* Mr. Birkbeck complains of this; and, indeed, what a contrast with the homesteads and cottages, which he left be-

hind him near that exemplary spot, Guildford in Surrey! Both blots are, however, easily accounted for.

17. The *fences* are of *post and rail.* This arose, in the first place, from the abundance of timber that men knew not how to dispose of. It is now become an affair of *great expense* in the populous parts of the country; and, that it might, with great advantage and perfect ease, be got rid of, I shall clearly show in another part of my work.

18. The *dwellings and gardens* and *little out houses of labourers*, which form so striking a feature of beauty in England, and especially in Kent, Sussex, Surrey, and Hampshire, and which constitute a sort of fairy-land, when compared with those of the labourers in France, are what I, for my part, most feel the want of seeing upon Long Island. Instead of the neat and warm little cottage, the yard, cow-stall, pig-sty, hen-house, all in miniature, and the garden, nicely laid out and the paths bordered with flowers, while the cottage door is crowned with a garland of roses or honey-suckle: instead of these, we here see the labourer content with a shell of boards, while all around him lies as barren as the sea-beach; though the natural earth would send melons, the finest in the world, creeping round his door, and though there is no English shrub, or flower, which will not grow and flourish here. This want of attention in such cases is hereditary from the first settlers. They found land so *plenty*, that they treated small spots with contempt. Besides, the *example* of neatness was wanting. There was no gentlemen's gardens, kept as clean as drawing-rooms with grass as even as a carpet. From endeavouring to imitate perfection men arrive at mediocrity; and, those who never have seen, or heard of perfection, in these matters, will naturally be slovens.

19. Yet, notwithstanding these *blots*, as I deem

them, the face of the country, in summer, is very fine. From December to *May*, there is not a *speck of green*. No green grass and turnips and wheat and rye and rape, as in England. The frost comes and sweeps all vegetation and verdant existence from the face of the earth. The wheat and rye live; but, they lose all their verdure. Yet the state of things *in June*, is, as to crops, and fruits, much about what it is in England; for, when things do begin to grow, they grow indeed; and the general harvest for *grain* (what we call *corn*) is a full month *earlier* than in the *South* of England!

20. Having now given a sketch of the face of the country, it only remains for me to speak in this place of the *Climate* and *Seasons*, because I shall sufficiently describe the *Soil*, when I come to treat of my own actual experience of it. I do not like, in these cases, *general descriptions*. Indeed, they must be very imperfect; and, therefore, I will just give a copy of *a journal*, kept by myself, from the 5th of May, 1817, to the 20th of April, 1818. This, it appears to me is the best way of proceeding; for, then, there can be no deception; and, therefore, I insert it as follows:

1817.

May 5. Landed at New-York.

6. Went over to Long Island. Very fine day, warm as *May* in England. The Peach trees going out of bloom. Plum trees in full bloom.

7. Cold, sharp, East wind, just like that which makes the old debauchees in London shiver and shake.

8. A little frost in the night, and a warm day.

9. Cold in the shade and hot in the sun.

10. The weather has been dry for some time. The grass is only beginning to grow a little.

May 11. Heavy Thunder and rain in the night, and all this day.

12. Rain till noon. Then warm and beautiful.

13. Warm, fine day. Saw, in a garden, lettuces, onions, carrots and parsnips, just come up out of the ground.

14. Sharp, drying wind. People travel with great coats to be guarded against the morning and evening air.

15. Warm and fair. The farmers are beginning to plant their *Indian corn.*

16. Dry wind. Warm in the sun. Cherry trees begin to come out in bloom. The Oaks show no green yet. The sassafras in flower; or whatever else it is called. It resembles the elder flower a good deal.

17. Dry wind. Warmer than yesterday. An English April morning, that is to say, a sharp April morning, and a *June day.*

18. Warm and fine. Grass pushes on. Saw some Lucern in a warm spot, 8 inches high.

19. Rain all day. Grass grows apace. People plant potatoes.

30. Fine and warm. A good cow sells, with a calf by her side, for 45 dollars. Steer two years old 20 dollars. A working ox, five years old, 40 dollars.

21. Fine and warm day; but the morning and evening coldish. The cherry trees in full bloom, and the pear trees nearly the same. Oats, sown in April, up, and look extremely fine.

22. Fine and warm.—Apple trees fast coming into bloom. Oak buds breaking.

23. Fine and warm.—Things grow away.—Saw kidney beans up and looking pretty well. Saw some beets coming up. Not

a sprig of *Parsley* to be had for love or money. What improvidence! Saw some cabbage plants up and in the fourth leaf.

May 24. Rain at night and all day to-day. Apple trees in full bloom, and cherry bloom falling off.

25. Fine and warm.

26. Dry coldish wind, but hot sun. The grass has pushed on most furiously.

27. Dry wind. Spudded up a corner of ground and sowed (in the natural earth) *cucumbers* and *melons*. Just the time they tell me.

28. Warm and fair.

29. Cold wind; but the sun warm. *No fires* in parlours now, except now-and-then, in the mornings and evenings.

30. Fine and warm.—Apples have dropped their blossoms. And now the grass, the wheat, the rye and every thing, which has stood the year, or winter through, appear to have *overtaken* their like in Old England.

31. Coldish morning and evening.

June 1. Fine warm day; but saw a man, in the evening *covering* something in a garden. It was *kidney-beans*, and he feared a *frost!* To be sure they are very tender things. I have had them nearly killed in England, by *June* frosts.

2. Rain and warm.—The Oaks and all the trees, except the Flowering Locusts, begin to look greenish.

3. Fine and warm.—The *Indian corn* is generally come up; but looks yellow in consequence of the cold nights and little frosts.—N. B. I ought here to describe to my English Readers what this same *Indian Corn* is.—The Americans call it *Corn*, by way of eminence, and wheat,

rye, barley and oats, which we confound under the name of *corn*, they confound under the name of *grain*. The Indian Corn, in its ripe seed state, consists of an *ear*, which is in the shape of a *spruce fir apple*. The grains, each of which is about the bulk of the largest marrowfat pea, are placed all round a stalk, which goes up the middle, and this little stalk, to which the seeds adhere, is called the Corn *Cob*. Some of these ears (of which from 1 to 4 grow upon a plant) are more than a *foot* long; and I have seen many, each of which weighed more than *eighteen ounces*, avoirdupois weight. They are long or short, heavy or light, according to the land and the culture. I was at a Tavern, in the village of North Hempstead, last fall (of 1817) where I had just read, in the Courier, English newspaper, of a Noble Lord, who had been sent on his travels to France at ten years of age, and who, from his high-blooded ignorance of vulgar things, I suppose, had *swallowed a whole ear of corn*, which, as the news-paper told us, had well-nigh choaked the Noble Lord. The Landlord had just been showing me some of his fine ears of Corn; and I took the paper out of my pocket, and read the paragraph: "What!" said he, "swallow a "*whole ear of corn at once!* No wonder "that they have swallowed up poor Old "John Bull's substance." After a hearty laugh, we explained to him, that it must have been *wheat* or *barley*. Then he said, and very justly, that the lord must have been a much greater fool than a hog is. The plant of the Indian Corn,

grows, upon an average, to about eight feet high, and sends forth the most beautiful leaves, resembling the broad leaf of the water flag. It is planted in hills, or rows, so that the plough can go between the standing crop. Its stalks and leaves are *the best* of fodder, if carefully stacked; and its grain is good for every thing. It is eaten by man and beast in all the various shapes of whole corn, meal, cracked, and every other way that can be imagined. It is tossed down to hogs, sheep, cattle, in the whole ear. The two former thresh for themselves, and the latter eat *Cob* and all. It is eaten, and is a very delicious thing, in its half-ripe, or *milky* state: and *these* were the "*ears of corn*," which the Pharisees complained of the Disciples for plucking off to eat on the Sabbath Day; for, how were they to eat *wheat ears*, unless after the manner of the "Noble Lord" above mentioned? Besides, the Indian Corn is a native of Palestine. The French, who doubtless, brought it originally from the Levant, call it *Turkish Corn*. The *Locusts*, that John the Baptist lived on, were not (as I used to wonder at when a boy) the noxious vermin that devoured the land of Egypt; but, the *bean*, which comes in the long pods borne by the three-thorned *Locust tree*, and of which I have an abundance here. The *wild-honey* was the honey of wild bees; and the hollow trees here contain swarms of them. The trees are cut, sometimes, in winter, and the part containing the swarm, brought and placed near the house. I saw this lately in Pennsylvania.

June 4. Fine rain. Began about ten o'clock.

5. Rain nearly all day.

6. Fine and warm. Things grow surprisingly.

7. Fine and warm. Rather cold at night.

8. Hot.

9. Rain all day. The wood green, and so beautiful! The leaves look so fresh and delicate! But the Flowering Locust, only begins to show leaf. It will, by-and-by, make up, by its beauty, for its shyness at present.

10. Fine warm day. The cattle are up to their eyes in grass.

11. Fine warm day. Like the very, very finest days, in England in June.

12. Fine day. And, when I say fine, I mean really fine. Not a cloud in the sky.

13. Fine and hot. About as hot as the hottest of our English July weather in common years. Lucern 2 1-2 feet high.

14. Fine and hot; but we have always a *breeze* when it is hot, which I did not formerly find in Pennsylvania. This arises, I suppose, from our nearness to the sea.

15. Rain all day.

16. Fine, beautiful day. Never saw such fine weather. Not a morsel of *dirt*. The ground sucks up all. I walk about and work in the land in shoes made of Deer skin. They are dressed *white*, like breeches-leather. I began to *leave off my coat* to-day, and do not expect to put it on again till October. My hat is a white chip, with broad brims. Never better health.

17. Fine day. The partridges (miscalled quails) begin to sit. The orchard full of birds' nests; and, amongst others, a dove is sitting on her eggs in an apple tree.

June 18. Fine day.—Green peas fit to gather in pretty early gardens, though only of the common Hotspur sort.—May Duke cherries begin to be ripe.

19. Fine day.—But, now comes my alarm! The *Musquitoes*, and, still worse, the common *horse fly*, which used to plague us so in Pennsylvania, and which were the only things I ever disliked belonging to the climate of America. Musquitoes are bred in *stagnant water*, of which here is none. Flies are bred in *filth*, of which none shall be near me, as long as I can use a shovel and a broom. They will follow *fresh meat* and *fish*. Have neither; or be very careful. I have this day put all these precautions in practice; and, now let us see the result.

20. Fine day.—Carrots and Parsnips, *sown on the 3d and 4th instant*, all up, and in *rough leaf!* Onions up. The whole garden green in 18 days from the sowing.

21. Very hot.—Thunder and heavy Rain at night.

22. Fine day.—May Duke Cherries ripe.

23. Hot and close. Distant thunder.

24. Fine day.

25. Fine day. White heart and Black heart cherries getting ripe.

26. Rain. Planted out cucumbers and melons. I find I am rather late.

27. Fine day.

28. Fine day. Gathered Cherries for *drying* for winter use.

29. Fine day.

30. Rain all night. People are planting out their cabbage for the winter crop.

July 1. Fine day. Bought 20 bushels of *English* salt for *half a dollar a bushel!*

July 2. Fine day.
3. Fine day.
4. Fine day. Carrots, sown 3d June, 3 inches high.
5. Very hot day. *No flies yet.*
6. Fine hot day. Currants ripe. Oats in haw. Rye nearly ripe. Indian Corn two feet high. Hay-making nearly done.
7. Rain and thunder early in the morning.
8. Fine hot day. Wear no waistcoat now, except in the morning and evening.
9. Fine hot day. Apples to make puddings and pies; but our house-keeper does not know how to make an apple pudding. She puts the pieces of apple amongst the batter! She has not read Peter Pindar.
10. Fine hot day.—I work in the land morning and evening and write in the day, in a north room.—The *dress* is now become a very convenient, or, rather, a very little inconvenient, affair. Shoes, trowsers, shirt and hat. No plague of dressing and undressing!
11. Fine hot day in morning, but began to grow dark in the afternoon. A sort of haze came over.
12. Very hot day. The common black cherries, the little red honey-cherries, all ripe now, and falling and rotting by the thousands of pounds weight. But this place which I rent is remarkable for abundance of cherries. Some *early peas*, sown in the second week in *June*, fit for the table. This is thirty days from the time of sowing.—*No flies yet! No Musquitoes!*
13. Hot and heavy, like the pleading of a Quarter-Sessions lawyer. No *breeze* today, which is rarely the case.

July 14. Fine day. The Indian Corn four feet high.

15. Fine day. We eat Turnips, sown on the 2d of June. Early cabbages (a gift) sown in May.

16. Fine hot day. Fine young onions, sown on the 8th of June.

17. Fine hot day. Harvest of wheat, rye, oats and barley, half done. But, indeed, what is it to do, when the weather does so much!

18. Fine hot day.

19. Rain all day.

20. Fine hot day and some wind. All dry again as completely as if it had not rained for a year.

21. Fine hot day; but heavy rain at night.—*Flies a few.* Not more than in England. My son John, who has just returned from Pennsylvania, says they are as great torments there as ever. At a friend's house (a farm-house) there, *two quarts of flies* were caught in *one window* in *one day!* I do not believe that there are two quarts in all my premises. But, then, I cause all *wash* and *slops* to be carried forty yards from the house. I suffer no peelings or greens or any rubbish to lie near the house. I suffer no fresh meat to remain more than one day fresh in the house. I proscribe all fish. Do not suffer a dog to enter the house. Keep all pigs at a distance of sixty yards. And sweep all round about once every week at least.

22. Fine hot day.

23. Fine hot day. *Sowed Buckwheat* in a piece of very poor ground.

July 24. Fine hot day. Harvest (for *grain*) nearly over. The main part of the *wheat*, &c. is put into *Barns*, which are very large and commodious. Some they put into small *ricks*, or *stacks*, out in the fields, and there they stand, *without any thatching*, 'till they are wanted to be taken in during the winter, and, sometimes they remain out for a whole year. Nothing can prove more clearly than this fact the great difference between this climate and that of England, where, as every body knows, such stacks would be mere heaps of muck by January, if they were not, long and long before that time, carried clean off the farm by the wind. The crop is sometimes *threshed* out in the field by the feet of horses, as in the South of France. It is sometimes carried into the barns'-floor, where three or four horses, or oxen, going *a-breast* tramples out the grain as the sheaves, or swarths are brought in. And this explains to us the humane precept of Moses, " not to *muzzle* the ox as he *treadeth out the grain*," which we country people in England cannot make out. I used to be puzzled, too, in the story of Ruth, to imagine how Boaz could be busy amongst his *threshers* in the height of harvest.—The weather is so fine, and the grain so dry, that, when the wheat and rye are threshed by the flail, the sheaves are barely untied, laid upon the floor, receive a few raps, and are then tied up, clean threshed, for straw, without the order of the straws being in the least changed! The ears and butts retain their places in the sheaf, and the band that tied the sheaf before ties

it again. The straw is as bright as burnished gold. Not a speck in it. These facts will speak volumes to an English farmer, who will see with what ease work must be done in such a country.

July 25. Fine hot day. Early pea, mentioned before, *harvested*, in forty days from the sowing. *Not more flies than in England.*

26. Fine broiling day. The Indian Corn grows away now, and has, each plant, at least *a tumbler full of water standing in the sockets of its leaves*, while the sun seems as if it would actually burn one. Yet we have *a breeze;* and, under these fine shady Walnuts and Locusts and Oaks, and on the fine grass beneath, it is very pleasant. Wood-cocks begin to come very thick about.

27. Fine broiler again. Some friends from England here to-day. We spent a pleasant day; drank success to the Debt, and destruction to the Borough usurpers, in gallons of milk and water.—*Not more flies than in England.*

28. Very, very hot. The Thermometer 85 degrees in the shade: but *a breeze*. Never slept better in all my life. No covering. A sheet under me, and a straw bed. And then, so happy to have no clothes to put on but shoes and trowsers! My window looks to the East. The moment the Aurora appears, I am in the orchard. It is impossible for any human being to lead a pleasanter life than this. How I pity those, who are *compelled* to endure the stench of cities; but, for those who remain there without being compelled, I have no pity.

29. Still the same degree of heat. I measur-

ed a water-melon runner, which grew eighteen inches in the last 48 hours. The *dews* now are equal to showers. I frequently, in the morning, wash hands, face, feet and legs in the dews on the high grass. The Indian Corn shoots up now so beautifully!

July 30. Still melting hot.

31. Same weather.

August 1. Same weather. I take off two shirts a day wringing wet. I have a clothes horse to hang them on to dry. Drink about 20 good tumblers of milk and water every day. No ailments. Head always clear. Go to bed by day light very often. Just after the hens go to roost, and rise again with them.

2. Hotter and hotter, I think; but, in this weather we always have our friendly breeze.——*Not a single Musquito yet.*

3. Cloudy and a little shattering of rain; but not enough to lay the dust.

4. Fine hot day.

5. A very little rain. Dried up in a minute. Planted cabbages with *dust* running into the holes.

6. Fine hot day.

7. Appearances forbode rain.—I have observed that, when rain is approaching, the *stones* (which are the rock stone of the country), with which a piazza adjoining the house is paved, *get wet.* This wet appears, at first, at the top of each round stone, and, then, by degrees, goes all over it. Rain is *sure* to follow. It has never missed; and, which is very curious, the rain lasts exactly as long as the stones take to get all over wet before it comes! The stones get dry again *before the rain*

ceases. However, this foreknowledge of rain is of little use here; for, when it comes, it is sure to be *soon gone;* and to be succeeded by a sun, which restores all to rights. I wondered, at first, why I never saw any *barometers* in people's houses, as almost every farmer has them in England. But, I soon found, that they would be, if perfectly true, of no use. *Early Peas ripe.*

Aug. 8. Fine Rain. It comes pouring down.

9. Rain still, which has now lasted 60 hours.—Killed a lamb, and, in order to keep it fresh, sunk it down into the *well.* —The wind makes the Indian Corn bend.

10. Fine clear hot day. The grass, which was brown the day before yesterday, is already beautifully green. In one place, where there appeared no signs of vegetation, the grass is *two inches high.*

11. Heavy Rains at night.

12. Hot and close.

13. Hot and close.

14. Hot and close. No breezes these three days.

15. Very hot indeed. 80 degrees in a north aspect at 9 in the evening. *Three* wet shirts to-day. Obliged to put on a dry shirt *to go to bed in.*

16. Very hot indeed. 85 degrees, the thermometer hanging under the Locust trees and swinging about with the breeze. The *dews* are now like heavy showers.

17. Fine hot day. Very hot. I fight the Borough-villains, stripped to my shirt, and with nothing on besides, but shoes and trowsers. Never ill; no head-achs; no muddled brains. The *milk and water* is

a great cause of this. I live on Sallads, other garden vegetables, apple puddings and pies, butter, cheese (*very good* from Rhode Island), eggs, and bacon. Resolved to have no more fresh meat, 'till cooler weather comes. Those who have a mind to swallow, or be swallowed by, *flies* may eat fresh meat for me.

Aug. 18. Fine and hot.

19. Very hot.

20. Very hot ; but a breeze every day and night.——Buckwheat, sown 23d July, 9 inches high, and, poor as the ground was, looks very well.

21. Fine hot day.

22. Fine hot day.

23. Fine hot day. I have now got an English woman servant, and she makes us famous apple puddings. She says she has never read Peter Pindar's account of the dialogue between the King and Cottage woman ; and yet she knows very well how to get the apples within side of the paste. N. B. No man ought to come here, whose wife and daughters cannot make puddings and pies.

24. Fine hot day.

25. Fine hot day.

26. Fine hot day.

27. Fine hot day. Have not seen a cloud for many days.

28. Windy and rather coldish. Put on cotton stockings and a waistcoat with sleeves. Do not like this weather.

29. Same weather. Do not like it.

30. Fine and hot again. Give a great many apples to hogs. Got some hazlenuts in the wild grounds. Larger than the English ; and much about the same taste.

Aug. 31. Fine hot day. Prodigious *dews*.

Sept. 1. Fine and hot.

2. Fine and hot.

3. Famously hot. Fine breezes. Began imitating the Disciples, at least, in their *diet;* for, to-day, we began "*plucking the ears of corn*" in a patch planted in the garden on the second of June. But, we, in imitation of Pindar's pilgrim, take the liberty to *boil* our Corn. We shall not starve now.

4. Fine and hot. 83 degrees under the Locust trees.

5. Very hot indeed, but fair, with our old breeze.

6. Same weather.

7. Same weather.

8. Same weather.

9. Rather hotter. We, amongst seven of us, eat about 25 ears of corn a day. With *me* it wholly supplies the place of bread. It is the choicest gift of God to man, in the way of food. I remember, that ARTHUR YOUNG observes, that the proof of *a good climate* is, that Indian Corn will come to perfection in it. Our Corn is very fine. I believe, that a wine-glass-ful of *milk* might be squeezed out of one ear. No wonder the Disciples were tempted to pluck it when they were hungry, though it was on the Sabbath Day!

10. Appearances for Rain; and, it is time; for my neighbours begin to cry out, and our rain-water cistern begins to shrink. The *well* is there, to be sure; but, to pull water up from 70 feet is no joke, while it requires nearly as much sweat to get it up as we get water.

Sept. 11. No Rain; but cloudy. 83 degrees in the shade.
12. Rain and very hot in the morning. Thunder and heavy rain at night.
13. Cloudy and cool. Only 55 degrees in shade.
14. Cloudy and cool.
15. Fair and cool. *Made a fire* to write by. Don't like this weather.
16. Rain, warm.
17. Beautiful day. Not very hot. Just like a fine day in July in England after a rain.
18. Same weather. Wear stockings now and a waistcoat and neck handkerchief.
19. Same weather. Finished our Indian Corn, which, on less than 4 rods, or perches of ground, produced 447 ears. It was singularly well cultivated. It was the long Yellow Corn. Seed given me by my excellent neighbour, Mr. John Tredwell.
20. Same weather.
21. Same weather.
22. Same weather.
23. Cloudy and hotter.
24. Fine Rain all last night and until ten o'clock to-day.
25. Beautiful day.
26. Same weather. 70 degrees in shade. Hot as the hot days in August in England.
27. Rain all last night.
28. Very fine and warm. Left off the stockings again.
29. Very fine. 70 degrees in shade.
30. Same weather.

Oct. 1. Same weather. Fresh meat keeps pretty well now.
2. Very fine; but, there was a little *frost*

this morning, which did not, however, affect the late sown *Kidney Beans*, which are as tender as the cucumber plant.

Oct. 3. Cloudy and warm.

4. Very fine and warm. 70 degrees in shade. The apples are very fine. We are now cutting them and quinces to *dry* for winter use. My neighbours give me quinces. We are also cutting up and drying peaches.

5. Very fine and warm. Dwarf Kidney Beans very fine.

6. Very fine and warm. *Cutting Buckwheat.*

7. Very fine and warm. 65 degrees in shade at 7 o'clock this morning.—Windy in the afternoon. The wind is knocking down the *fall-pippins* for us. One picked up to-day weighed 12 1-4 ounces avoirdupois weight. The average weight is about 9 ounces, or, perhaps, 10 ounces. This is the finest of all apples. Hardly any *core*. Some *none at all.* The richness of the pine-apple without the roughness. If the King could have seen one of *these* in a dumpling! This is not the *Newtown pippin*, which is sent to England in such quantities. That is a *winter* apple. Very fine at Christmas ; but far inferior to this fall pippin, taking them both in their state of perfection. It is useless to send *the trees* to England, unless the heat of the sun and the rains and dews could be sent along with the trees.

8. Very fine. 68 in shade.

9. Same weather.

10. Same weather. 59 degrees in shade. A little white frost this morning. It just touched the tips of the Kidney Bean leaves ; but, not those of the cucumbers or melons, which are near fences.

Oct. 11. Beautiful day. 61 degrees in shade. Have not put on *coat* yet. Wear thin stockings, or socks. Waistcoat with sleeves and neck cloth. In New-York Market, *Kidney Beans* and *Green Peas.*

12. Beautiful day. 70 degrees in shade.

13. Same weather.

14. Rain. 50 degrees in shade. Like a fine, warm *June* rain in England.

15. Beautiful day. 56 degrees in shade. Here is *a month of October!*

16. Same weather. 51 degrees in shade.

17. Same weather. But a little warmer in the day. A *smart frost* this morning. The Kidney Beans, Cucumber and Melon plants, pretty much cut by it.

18. A little rain in the night. A most beautiful day. 54 degrees in shade. A June day for England.

19. A very *white frost* this morning. Kidney Beans, Cucumbers, Melons, all demolished; but a beautiful day. 56 degrees in shade.

20. Another frost, and just such another day. —*Threshing Buckwheat in field.*

21. No frost. 58 degrees in shade.

22. Finest of English June days. 67 degrees in shade.

23. Beautiful day. 70 degrees in shade. Very few summers in England that have a day hotter than this. It is this fine sun that makes the fine apples!

24. Same weather precisely. Finished Buckwheat threshing and winnowing. The men have been away at a horse-race; so that it has laid out in the field, partly threshed and partly not, for five days. If rain had come, it would have been of no consequence. All would have been dry

again directly afterwards. What a stew a man would be in, in England, if he had his grain lying about out of doors in this way! The *cost* of threshing and winnowing 60 bushels was 7 dollars, 1*l.* 11*s.* 6*d.* English money, that is to say, 4*s.* *a quarter*, or 8 Winchester bushels. But, then, the *carting* was next to nothing. Therefore, though the labourers had *a dollar a day each*, the expense, upon the whole was not so great as it would have been in England. So much does the climate do!

Oct. 25. Rain. A warm rain, like a fine June rain in England. 57 degrees in shade. The late frosts have killed or, at least, pinched, the leaves of the trees; and they are now red, yellow, russet, brown, or of a dying green. Never was any thing so beautiful as the bright sun, shining through these fine lofty trees upon the gay verdure beneath.

26. Rain. Warm. 58 degrees in shade. This is the general *Indian Corn harvest.*

27. Rain. Warm. 58 degrees in shade. Put on *coat*, *black hat* and *black shoes.*

28. Fine day. 56 degrees in shade. Pulled up a *Radish* that weighed 12 pounds! I say *twelve*, and measured 2 feet 5 inches round. From common English seed.

29. Very fine indeed.

30. Very fine and warm.

31. Very fine. 54 degrees in shade. Gathered our last lot of winter apples.

Nov. 1. Rain all the last night and all this day.

2. Rain still. 54 degrees in shade. Warm. Things grow well. The *grass very fine and luxuriant.*

3. Very fine indeed. 56 in shade. Were it

not for the colour of the leaves of the trees, all would look like June in England.

Nov. 4. Very, very fine. Never saw such pleasant weather. *Digging Potatoes.*

5. Same weather precisely.

6. A little cloudy but warm.

7. Most beautiful weather! 63 degrees in shade. N. B. This is *November.*

8. A little cloudy at night fall. 68 degrees in shade; that is to say, English *Summer heat* all but 7 degrees.

9. Very fine.

10. Very fine.

11. Very fine. When I got up this morning, I found the thermometer hanging on the Locust trees, dripping with dew, at 62 degrees. *Left off my coat again.*

12. Same weather. 69 degrees in shade.

13. Beautiful day, but cooler.

14. Same weather. 50 degrees in shade. The high ways and paths as clean as a boarded floor; that is to say, from *dirt* or *mud.*

15. Gentle rain. 53 in shade. Like a gentle rain in May in England.

16. Gentle rain. Warm. 56 in shade. What a *November* for an Englishman to see! My White Turnips have grown almost the whole of their growth in this month. The Swedish, planted late, grow surprising now, and have a luxuriancy of appearance exceeding any thing of the kind I ever saw. We have fine loaved lettuces; endive, young onions, young radishes, cauliflowers with heads five inches over. The rye fields grow beautifully. They have been *food* for *cattle* for a month, or six weeks past.

17. Cloudy. Warm.

Nov. 18. Same weather. 55 degrees in shade.
19. *Frost* and the ground pretty hard.
20. Very fine indeed. Warm. 55 degrees in shade.
21. Same weather.
22. Cold, damp air, and cloudy.
23. Smart frost at night.
24. 25. 26. 27. Same. Warm in the day time.
28. 29. Same; but more warm in the day.
30. Fine warm and beautiful day; no frost at night. 57 degrees in shade.

Dec. 1. Same weather precisely; but, we begin to fear the setting in of winter, and I am very busy in covering up cabbages, mangle wurzle, turnips, beets, carrots, parsnips, parsley, &c. the mode of doing which (not less *useful* in England than here, though not so indispensably necessary) shall be described when I come to speak of the management of these several plants.
2. Fine warm Rain. 56 in shade.
3. 4. 5. 6. 7. 8. Very fair and pleasant, but frost sufficiently hard to put a stop to our getting up and stacking Turnips. Still, however, the cattle and sheep do pretty well upon the grass, which is long and dead. Fatting oxen we feed with the greens of Ruta Baga, with some Corn, (Indian, mind) tossed down to them in the ear. Sheep (Ewes that had lambs in spring) we kill *very fat* from the grass. *No dirt.* What a clean and convenient soil!
9. Thaw. No rain. We get on with our work again.

Dec. 10. Open mild weather.
11. Same weather. Very pleasant.
12. Rain began last night.
13. Rain all day.
14. Rain all day. The old Indian remark is, that the winter does not *set in*, 'till the *ponds be full*. It is coming, then.
15. Rain 'till 2 o'clock. We kill mutton now. Ewes, brought from Connecticut, and sold to me here at two dollars each in July, just after shearing. I sell them now alive at three dollars each from the grass. Killed and sent to market, they leave me the loose fat for candles and fetch about 3 dollars and a quarter besides.
16. Sharp *North West* wind. This is the *cold American Wind*. "A *North Wester*" means all that can be imagined of clear in summer and cold in winter. I remember hearing from that venerable and excellent man, Mr. BARON MASERES, a very elegant eulogium on the Summer North Wester in England. This is the only public servant that I ever heard of, who refused a *proffered augmentation of salary!*
17. A hardish frost.
18. Open weather again.
19. Fine mild day; but began freezing at night-fall.
20. Hard frost.
21. Very sharp indeed. Thermometer down to 10 degrees; that is to say, 22 degrees colder than barely freezing.
22. Same weather. Makes us *run*, where we used to walk in the fall, and to saunter in the summer. It is no new thing to *me!* but it makes our other English people shrug up their shoulders.
23. Frost greatly abated. Stones show for

wet. It will come in spite of the fine, serene sky, which we now see.

Dec. 24. A Thaw.—Servants made a lot of *candles* from mutton and beef fat, reserving the coarser parts to make *soap.*

25. Rain. Had some English friends. Surloin of own beef. Spent the evening in the light of *own candles*, as handsome as I ever saw, and, I think, the very *best* I ever saw. The reason is, that the tallow is *fresh*, and that it is unmixed with *grease*, which, and staleness, is the cause, I believe, of candles *running*, and plagueing us while we are using them. What an injury is it to the farmers in England, that they dare not, in this way, use their own produce! Is it not *a mockery* to call a man *free*, who no more dares turn his tallow into candles for his own use, than he dares rob upon the high way? Yet, it is only by means of tyranny and extortion like this, that the hellish system of Funding and of Seat-Selling can be upheld.

26. Fine warm day. 52 degrees in shade.

27. Cold, but little frost.

28. Same weather. Fair and pleasant. The late sharp frost has changed to a *complete yellow* every leaf of some Swedish Turnips (Ruta Baga), *left to take their chance:* It is a poor chance, I believe!

29. Same weather.

30. Rain all day.

31. Mild and clear. No frost.

1818.

Jan. 1. Same weather.

2. Same weather.

3. Heavy Rain.

4. A frost that makes us jump and skip about like larks. Very seasonable for a slug-

gish fellow. Prepared for winter. Patched up a boarded building, which was formerly a coach-house; but, which is not so necessary to me, in that capacity, as in that of a *fowl-house*. The neighbours tell me, that the poultry will roost out on the trees all the winter, which, the weather being so *dry* in winter, is very likely; and, indeed, they *must*, if they have *no house*, which is almost universally the case. However, I mean to give the poor things *a choice*. I have *lined* the said coach-house with *Corn Stalks* and *leaves of trees*; and have tacked up Cedar boughs to hold the lining to the boards, and have laid a *bed of leaves* a foot thick all over the floor. I have secured all against dogs, and have made ladders for the fowls to go in at holes six feet from the ground. I have made pig-styes, lined round with Cedar boughs and well covered. A sheep yard, for a score of Ewes to have lambs in spring, surrounded with a hedge of cedar boughs, and with a shed for the Ewes to lie under, if they like. The oxen and cow are tied up in a stall. The dogs have a place, well covered, and lined with corn stalks and leaves. And now, I can, without anxiety, sit by the fire, or lie in bed, and hear the North-Wester whistle.

Jan. 5. Frost. Like what we call "a *hard* frost" in England.

6. Such another frost at night, but a thaw in the middle of the day.

7. Little frost. Fine warm day. The sun seems loath to quit us.

8. Same weather.

9. A harder frost, and snow at night. The

fowls, which have been peeping at my ladders for two or three evenings, and partially roosting in their house, made their *general entry* this evening! They are the best judges of what is best for them. The *turkeys* boldly set the weather at defiance, and still roost on *the top*, the *ridge*, of the roof of the house. Their feathers prevent their legs from being frozen, and so it is with all poultry; but, still, a house *must*, one would think, be better than the open air at this season.

Jan. 10. Snow, but *sleppy*. I am now at New-York on my way to Pennsylvania. N. B. This journey into Pennsylvania had, for its principal object an appeal to the justice of the Legislature of that state for redress for great loss and injury sustained by me, nearly twenty years ago, in consequence of the tyranny of one M'KEAN, who was then Chief Justice of that State. The appeal has not *yet* been successful; but, as I confidently expect, that it finally will, I shall not, at present, say any thing more on the subject.—My journey was productive of much and various observation, and, I trust, of useful knowledge. But, in this place, I shall do little more than give an account of the *weather;* reserving for the SECOND PART, accounts of *prices* of land, &c. which will there come under their proper heads.

11. Frost but not hard. Now at New-York.

12. Very sharp frost. Set off for Philadelphia. Broke down on the road in New-Jersey.

13. Very hard frost still. Found the Delaware, which divides New-Jersey from Pennsylvania, frozen over. Good roads

now. Arrived at Philadelphia in the evening.

Jan. 14. Same weather.

15. Same weather. The question eagerly put to me by every one in Philadelphia, is: "Don't you think the city *greatly improved?*" They seem to me to confound *augmentation* with *improvement.*—It always was a fine city, since I first knew it; and it is very greatly augmented. It has, I believe, nearly doubled its extent and number of houses since the year 1799. But, after being, for so long a time, familiar with London, every other place appears little. After *living* within a few hundreds of yards of Westminster Hall and the Abbey Church and the Bridge, and looking from my own windows into St. James's Park, all other buildings and spots appear mean and insignificant. I went to-day to see the house I formerly occupied. How *small!* It is always thus: the words *large* and *small* are carried about with us in our minds, and we forget real *dimensions.* The idea, *such as it was received*, remains during our absence from the object. When I returned to England, in 1800, after an absence from the country parts of it, of sixteen years, the trees, the hedges, even the parks and woods, seemed so *small!* It made me laugh to hear little gutters, that I could jump over, called *Rivers!* The Thames was but a "*Creek!*" But, when, in about a month after my arrival in London, I went to *Farnham*, the place of my birth, what was my surprise! Every thing was become so pitifully *small!* I had to cross, in my post-chaise, the long

and dreary heath of Bagshot. Then, at the end of it, to mount a hill, called hungry-hill; and from that hill I knew that I should look down into the beautiful and fertile vale of Farnham. My heart fluttered with impatience, mixed with a sort of fear, to see all the scenes of my childhood; for I had learnt before, the death of my father and mother. There is a hill, not far from the town, called *Crooksbury Hill*, which rises up out of a flat, in the form of a *cone*, and is planted with Scotch fir trees. Here I used to go to take the eggs and young ones of crows and magpies. This hill was a famous object in the neighbourhood. It served us as the superlative degree of height. "*As high as Crooksbury Hill*" meant, with us, the utmost degree of height. Therefore, the first object that my eyes sought was this hill. *I could not believe my eyes!* Literally speaking, I, for a moment, thought the famous hill removed, and a little heap put in its stead; for I had seen, in New Brunswick, a single rock, or hill of solid rock, ten times as big and four or five times as high! The post-boy, going down hill and not a bad road, wisked me, in a few minutes to the Bush Inn, from the garden of which I could see that prodigious *sand hill*, where I had begun my gardening works. What a *nothing!* But now came rushing into my mind, all at once, my pretty little garden, my little blue smock-frock, my little nailed shoes, my pretty pigeons that I used to feed out of my hands, and the last kind words and the tears of my gentle and tender-hearted and affectionate mother! I hastened back

into the room. If I had looked a moment longer, I should have dropped.—When I came to reflect, *what a change!* I looked down at my dress. What a change! What scenes I had gone through! How altered my state! I had dined the day before at a Secretary of State's, in company with *Mr. Pitt*, and had been waited on by men in gaudy liveries! I had had nobody to assist me in the world. No teachers of any sort.—Nobody to shelter me from the consequence of bad, and no one to counsel me to good, behaviour. I felt proud. The distinctions of rank, birth, and wealth all became nothing in my eyes; and, from that moment (less than a month after my arrival in England) I resolved never to bend before them.

Jan. 16. Same weather. Went to see my old Quaker-friends at Bustleton, and particularly my beloved friend JAMES PAUL, who is very ill.

17. Returned to Philadelphia.—Little frost and a little snow.

18. 19. 20. 21. Moderate frost. Fine clear sky. The Philadelphians are *cleanly*, a quality which they owe chiefly to the Quakers. But, after being long and recently familiar with the towns in Surrey and Hampshire, and especially with Guildford, Alton and Southampton, no other towns appear clean and neat, not even Bath or Salisbury, which last is much about upon a par, in point of cleanliness, with Philadelphia; and, Salisbury is deemed a very cleanly place. Blandford and Dorchester are clean; but, I have never yet seen any thing like the towns in Surrey

and Hampshire. If a Frenchman, born and bred, could be taken up and carried blindfolded to Guildford, I wonder what his sensations would be, when he came to have the use of his sight! Every thing near Guildford seems to have received an influence from the town. Hedges, gates, stiles, gardens, houses inside and out, and the dresses of the people. The market day at Guildford is a perfect *show* of cleanliness. Not even a carter without a clean smock-frock and closely-shaven and clean-washed face. Well may Mr. BIRKBECK, who came from this very spot, think the people *dirty* in the Western Country!—I'll engage he finds more dirt upon the necks and faces of one family of his present neighbours, than he left behind him upon the skins of all the people in the three parishes of Guildford. However, he would not have found this to be the case in Pennsylvania, and especially in those parts where the Quakers abound; and, I am told, that, in the New England States, the people are as cleanly and as neat as they are in England. The sweetest flowers, when they become putrid, stink the most; and, a nasty woman is the nastiest thing in nature.

Jan. 22. Hard frost.—My *business* in Pennsylvania is with the Legislature. It is sitting at *Harrisburgh*. Set off to-day by the stage. Fine country; fine barns; fine farms. Must speak particularly of these in another place. Got to Lancaster. The largest *inland* town in the United States. A very clean and good town. No beggarly houses. All looks like *ease* and *plenty*.

Jan. 23. Harder frost; but not very severe. About as cold as the weather was during the six-weeks' continuance of the snow, in 1814, in England.

24. The same weather continues.

25. A sort of half-thaw. Sun warm. *Harrisburgh* is a new town, close on the left bank of the River *Susquehannah*, which is not frozen over, but has large quantities of ice floating on its waters. All vegetation, and all appearance of green, gone away.

26. Mild weather. Hardly any frost.

27. Thaw. Warm. Tired to death of the *Tavern* at HARRISBURGH, though a very good one. The cloth spread three times a day. Fish, fowl, meat, cakes, eggs, sausages; all sorts of things in abundance. Board, lodging, *civil* but not *servile* waiting on, beer, tea, coffee, chocolate. Price a dollar and a quarter a day. Here we meet all together: Senators, Judges, Lawyers, Tradesmen, Farmers and all. I am weary of the everlasting loads of meat. *Weary of being idle.* How few such days have I spent in my whole life!

28. Thaw and rain.—My business not coming on, I went to a *country* Tavern, hoping there to get a room to myself, in which to read my English papers, and sit down to writing. I am now at *M'Allister's Tavern*, situated at the foot of the first ridge of mountains; or rather, upon a little nook of land, close to the river, where the river has found a way through a break in the chain of mountains. Great enjoyment here. Sit and read and write. My mind is again in England. Mrs. M'ALLISTER just suits me. Does not pes-

ter me with questions. Does not cram me with meat. Lets me eat and drink what I like, and when I like, and gives mugs of nice milk. I find here, a very agreeable and instructive occasional companion, in Mr. M'ALLISTER the elder. But, of the various useful information that I received from him, I must speak in the Second Part of this work.

Jan. 29. Very hard frost this morning. Change very sudden. All about the house a glare of ice.

30. Not so hard. *Icicles* on the trees on the neighbouring mountains like so many millions of sparkling stones, when the sun shines, which is all the day.

31. Same weather. Two farmers of Lycoming county had heard that William Cobbett was here. They modestly introduced themselves. What a contrast with the "*Yeomanry Cavalry!*"

Feb. 1. Same weather. About the same as a "*hard* frost" in England.

2. Same weather.

3. *Snow.*

4. Little snow. Not much frost. This day, thirty-three years ago, I enlisted as a soldier. I always keep the day in recollection.

5. Having been to Harrisburgh on the 2d, returned to M'Allister's to-day *in a sleigh*. The River begins to be frozen over. It is about *a mile wide*.

6. Little snow again, and hardish frost.

7. Now and then a little snow.—Talk with some *hop-growers*. Prodigious crops in this neighbourhood; but, of them in the Second Part. What would a *Farnham* man think of *thirty hundred weight* of hops

upon *four hundred* hills, *ploughed* between, and the ground vines *fed off by sheep!* This is a very curious and interesting matter.

Feb. 8. *A real frost.*

9. Sharper. They say that the Thermometer is down to 10 *degrees below nought.*

10. A little milder; but very cold indeed.—The River completely frozen over, and sleighs and foot-passengers crossing in all directions.

11. Went back again to Harrisburgh. Mild frost.

12. Not being able to bear the idea of *dancing attendance*, came to *Lancaster*, in order to see more of this pretty town. A very fine Tavern (Slaymaker's); room to myself; excellent accommodations. Warm fires. Good and clean beds. *Civil* but not *servile*, landlord. The eating still more over-done than at Harrisburgh.—Never saw such profusion. I have made a bargain with the landlord: he is to give me a dish of chocolate a day, *instead of dinner*.—Frost, but mild.

13. Rain.—A real rain, but rather cold.

14. A complete day of rain.

15. A hard frost; much about like a hard frost in the naked parts of Wiltshire.—Mr. Hulme joined me on his way to Philadelphia from the city of Washington.

16. A hard frost.—Lancaster is a very pretty place. No *fine* buildings; but no *mean* ones. Nothing *splendid* and nothing *beggarly*. The people of this town seem to have had the prayer of Hagar granted them: "Give me, O Lord, neither *poverty* nor *riches*." Here are none of those poor, wretched habitations, which sicken

the sight at the *outskirts* of cities and towns in England; those abodes of the poor creatures, who have been reduced to beggary by the cruel extortions of the rich and powerful. And, this remark applies to *all* the towns of America that I have ever seen. This is a fine part of America. *Big Barns*, and modest dwelling houses. Barns of *stone*, a *hundred feet* long and *forty wide*, with two floors, and raised roads to go into them, so that the wagons go into the *first floor up-stairs*. Below are stables, stalls, pens, and all sorts of conveniences. Up-stairs are rooms for threshed Corn and Grain; for tackle, for meal, for all sorts of things. In the front (South) of the barn is the cattle yard. These are very fine buildings. And then, all about them looks so comfortable, and gives such manifest proofs of ease, plenty and happiness! Such is the country of WILLIAM PENN's settling! It is a curious thing to observe the *farm houses* in this country. They consist, almost without exception, of a considerably large and a very neat house, with sash-windows, and of a *small house*, which seems to have been *tacked on* to the large one; and, the proportion they bear to each other, in point of dimensions, is as nearly as possible, the proportion of size between a *Cow* and her *Calf*, the latter a month old. But, as to the *cause*, the process has been the opposite of this instance of the works of nature; for it is *the large house which has grown out of the small one.* The father, or grand-father, while he was toiling for his children, lived in the small house, constructed chiefly by himself,

and consisting of rude materials. The means, accumulated in the small house, enabled a son to rear the large one; and, though, when *pride* enters the door, the small house is sometimes demolished, few sons in America have the folly or want of feeling to commit such acts of filial ingratitude, and of real self-abasement. For, what inheritance so valuable and so honourable can a son enjoy as the proof of his father's industry and virtue? The progress of wealth and ease and enjoyment evinced by this regular increase of the size of the farmers' dwellings is a spectacle, at once, pleasing, in a very high degree, in itself, and, in the same degree, it speaks the praise of the system of government, under which it has taken place. What a contrast with the farm-houses in England! There the *little* farm-houses are falling into ruins, or, are actually become cattle-sheds, or, at best, *cottages*, as they are called, to contain a miserable labourer, who ought to have been a little farmer as his grand-father was. Five or six farms are there *now* levelled into one, in defiance of *the law;* for, there is a law to prevent it. The *farmer* has, indeed, a *fine house;* but, what a life do his labourers lead! The cause of this sad change is to be found in the crushing taxes; and the cause of them, in the Borough usurpation, which has robbed the people of their best right, and, indeed, without which right, they can enjoy no other. They talk of the *augmented population* of England; and, when it suits the purposes of the tyrants, they boast of this *fact*, as they are pleased

to call it, as a proof of the fostering nature of their government; though, just now, they are preaching up the vile and foolish doctrine of PARSON MALTHUS, who thinks, that there are *too many* people, and that they ought (those who *labour*, at least) to be *restrained from breeding so fast*. But, as to the fact, I do not believe it. There can be nothing in the shape of *proof;* for no actual enumeration was ever taken 'till the year 1800. We know well, that London, Manchester, Birmingham, Bath, Portsmouth, Plymouth, and all Lancashire and Yorkshire and some other counties have got a vast increase of miserable beings huddled together. But, look at Devonshire, Somersetshire, Dorsetshire, Wiltshire, Hampshire, and other counties. You will there see *hundreds of thousands* of Acres of land, where the old marks of the plough are visible, but which have not been cultivated for, perhaps, half a century. You will there see places, that were once considerable towns and villages, now having, within their ancient limits, nothing but a few cottages, the *Parsonage*, and a *single Farm-house.* It is a curious and a melancholy sight, where an ancient church, with its lofty spire or tower, the church sufficient to contain a thousand or two or three thousand of people conveniently, now stands surrounded by a score or half a score of miserable mud-houses, with floors of earth and covered with thatch; and this sight strikes your eye in all parts of the five Western counties of England. Surely these churches were not built without the

existence of a population somewhat proportionate to their size! Certainly not; for the churches are of various sizes, and, we sometimes see them very small indeed. Let any man look at the *sides of the hills* in these counties, and also in Hampshire, where *downs*, or open lands, prevail. He will there see, not only that these hills were formerly cultivated; but, that *banks*, from distance to distance, were made by the *spade*, in order to form little flats for the plough to go without tumbling the earth down the hill; so that the side of a hill looks, in some sort, like *the steps of a stairs*. Was this done *without hands*, and without *mouths* to consume the grain raised on the sides of these hills? The Funding and Manufacturing and Commercial and Taxing system has, by drawing wealth into great masses, drawn men also into great masses. London, the Manufacturing Places, Bath and other places of dissipation, have indeed, wonderfully increased in population. Country seats, Parks, Pleasure gardens, have, in a like degree, increased in number and extent. And, in just the same proportion has been the increase of Poor-houses, Mad-houses and Jails. But, *the people of England*, such as FORTESCUE described them, have been *swept away* by the ruthless hand of the Aristocracy, who, making their approaches by slow degrees, have, at last, got into their grasp the substance of the whole country.

Feb. 17. Frost, not very hard. Went back to Harrisburgh.

18. Same weather. Very fine. Warm in the middle of the day.

Feb. 19. Same weather. Quitted Harrisburgh, very much *displeased;* but, on this subject, I shall, if possible, keep silence, 'till *next year*, and until *the People* of Pennsylvania have had time to reflect; to clearly understand, my affair; and, when they *do understand it*, I am not at all afraid of receiving *justice* at their hands, whether I am *present or absent.*—Slept at Lancaster. One night more in this very excellent tavern.

20. Frost still. Arrived at Philadelphia along with my friend HULME. They are *roasting an ox on the Delaware.* The fooleries of England are copied here, and every where in this country, with wonderful avidity; and, I wish I could say, that some of the vices of our "*higher orders,*" as they have the impudence to call themselves, were not also imitated. However, I look principally at the mass of farmers; the sensible and happy farmers of America.

21. *Thaw and Rain.*—The *severe* weather is over for this year.

22. Thaw and Rain. A solid day of rain.

23. Little frost at night. Fine market. Fine meat of all sorts. As *fat mutton* as I ever saw. How mistaken Mr. Birkbeck is about American mutton.

24. Same weather. Very fair days now.

25 Went to Bustleton with my old friend, Mr. John Morgan.

26. Returned to Philadelphia. Roads very dirty and heavy.

27. *Complete thaw;* but, it will be long before the frost be out of the ground.

28. Same weather. *Very warm.* I hate this weather. Hot upon my back and melt-

ing ice under my feet. The people (those who have been lazy) are chopping away with axes the ice, which has grown out of the snows and rains, before their doors, during the winter. The hogs (best of scavengers) are very busy in the streets seeking out the bones and bits of meat, which have been flung out and frozen down amidst water and snow, during the two foregoing months. I mean including the present month. At New-York (and, I think, at Philadelphia also) they have *corporation* laws to prevent hogs from being in the streets. For *what reason*, I know not, except putrid meat be pleasant to the smell of the inhabitants. But, Corporations are seldom the wisest of law-makers. It is argued, that, if there were no hogs in the streets, people would not throw out their orts of flesh and vegetables. Indeed! What would they do with those orts, then? Make their hired servants eat them? The very proposition would leave them to cook and wash for themselves. Where, then, are they to fling these effects of superabundance? Just before I left New-York for Philadelphia, I saw a sow very comfortably dining upon a full quarter part of what appeared to have been a *fine leg of mutton*. How many a family in England would, if within reach, have seized this meat from the sow! And, are the tyrants, who have brought my industrious countrymen to that horrid state of misery, *never* to be called to account? Are they *always* to carry it as they now do! Every object almost, that strikes my view, sends my mind and heart back to

England. In viewing the ease and happiness of this people, the contrast fills my soul with indignation, and makes it more and more the object of my life to assist in the destruction of the diabolical usurpation, which has trampled on king as well as people.

March 1. Rain. Dined with my old friend SEVERNE, an honest Norfolk man, who used to carry his milk about the streets, when I first knew him, but, who is now a man of considerable property, and, like a wise man, lives in the same modest house where he formerly lived. Excellent roast beef and plum pudding. At his house I found an Englishman, and, from *Botley* too! I had been told of such a man being in Philadelphia, and that the man said, that he had *heard* of me, "*heard of such a gentleman*," but "did *not know much of him*." This was odd! I was desirous of *seeing* this man. Mr. SEVERNE got him to his house. His name is VERE. I knew him the moment I saw him; and, I wondered *why* it was that he *knew so little of me*. I found, that he *wanted work*, and that he had been *assisted* by some society in Philadelphia. He said he was *lame*, and he might be a little, perhaps. I *offered him work at once*. No: he wanted to have the *care* of a farm! "Go," said I, "for shame, and ask some farmer *for* "*work*. You will find it *immediately* and "with good wages. What should the "people in this country see in your face "to induce them to keep you in idle-"ness? They did not send for you. You "are a young man, and you came from a "country of able labourers. You may be

"rich if you will work. This gentleman "who is now about to cram you with "roast beef and plum pudding came to "this city nearly as poor as you are; "and, I first came to this country in no "better plight. Work, and I wish you "well; be idle, and you ought to starve." He told me, then, that he was *a hoop-maker;* and yet, observe, he wanted to have the *care* of a farm! N. B. If this book should ever reach the hands of Mr. RICHARD HUIXMAN, my excellent good friend of Chilling, I beg him to show this note to Mr. NICHOLAS FREEMANTLE, of Botley. *He* will know all about this VERE. Tell Mr. FREEMANTLE, that the Spaniels are beautiful, that Wood-cocks breed here in abundance; and tell him, above all, that I frequently think of him as a pattern of industry in business, of skill and perseverance and good humour as a sportsman, and of honesty and kindness as a neighbour. Indeed, I have pleasure in thinking of all my Botley neighbours, except the Parson, who, for their sakes, I wish, however, was my neighbour *now;* for *here* he might pursue his calling very *quietly.*

2. Open weather. Went to Bustleton, after having seen Messrs. STEVENS and PENDRILL, and advised them to forward to me affidavits of what they knew about OLIVER, the spy of the Boroughmongers.
3. Frost in the morning. Thaw in the day.
4. Same weather in the night. Rain all day.
5. Hard frost. Snow 3 inches deep.
6. Hard frost. About as cold as a hard frost in January in England.
7. Same weather.
8. Thaw. Dry and fine.

9. Same weather. Took leave, I fear for ever, of my old and kind friend, JAMES PAUL. His brother and son promise to come and see me here. I have pledged myself to *transplant* 10 acres of Indian Corn; and, if I write, in August, and say that *it is good*, THOMAS PAUL has promised that he will come; for, he thinks that the scheme is a mad one.

10. Same weather.—Mr. VAREE, a son-in-law of Mr. JAMES PAUL, brought me yesterday to another son-in-law's, Mr. EZRA TOWNSHEND at BIBERY. Here I am amongst the thick of the Quakers, whose houses and families pleased me so much formerly, and which pleasure is all now revived. Here all is ease, plenty, and *cheerfulness*. These people are never *giggling* and never in *low spirits*. Their minds, like their dress, are simple and strong. Their kindness is shown more in acts than in words. Let others say what they will, I have uniformly found those whom I have intimately known of this sect, sincere and upright men; and, I verily believe, that all those charges of hypocrisy and craft that we hear against Quakers arise from a feeling of *envy*; envy inspired by seeing them possessed of such abundance of all those things, which are the fair fruits of care, industry, economy, sobriety, and order, and which are justly forbidden to the drunkard, the glutton, the prodigal and the lazy. As the day of my coming to Mr. TOWNSHEND's had been announced beforehand, several of the young men, who were babies when I used to be there formerly, came to see "BILLY COBBETT," of whom they had heard and read so

much. When I saw them and heard them, "What *a contrast*," said I to myself, "with the senseless, gaudy, upstart, "hectoring, insolent and cruel Yeoman-"ry Cavalry in England, who, while they "grind their labourers into the revolt of "starvation, gallantly sally forth with "their sabres to chop them down at the "command of a Secretary of State; and, "who, the next moment, creep and fawn "like spaniels before their Boroughmon-"ger Landlords!" At Mr. TOWNSHEND's I saw a man, in his service, lately from YORKSHIRE, but an Irishman by birth. He wished to have an opportunity to see me. He had read many of my "little books." I shook him by the hand, told him he had now got a good house over his head and a kind employer, and advised him *not to move for one year*, and to save his wages during that year.

March 11. Same open weather.—I am now at *Trenton*, in New-Jersey, waiting for something to carry me on towards New-York.—Yesterday Mr. TOWNSHEND sent me on, under an escort of Quakers, to Mr. ANTHONY TAYLOR'S. He was formerly a merchant in Philadelphia, and now lives in his very pretty country-house on a very beautiful farm. He has some as fine and fat oxen as we generally see at Smithfield market, in London. I think they will weigh *sixty score each*. Fine farm yard. Every thing belonging to the *farm* good; but, what a neglectful *gardener!* Saw some *white thorns* here (brought from England), which, if I had wanted any proof, would have clearly proved to me, that they would, with *less care*, make

as good hedges here as they do at Farnham, in Surry. But, in another PART, I shall give full information upon this head. —Here my escort quitted me; but, luckily, Mr. NEWBOLD, who lives at about ten miles nearer Trenton than Mr. Taylor does, brought me on to his house. He is a much better gardener, or, rather, to speak the truth, has *succeeded a better*, whose example he has followed in part. But, his farm yard and buildings! This was a sight indeed! Forty head of horn-cattle in a yard, enclosed with a stone wall; and five hundred merino Ewes, besides young lambs, in the finest, most spacious, best contrived and most substantially built sheds I ever saw. The barn surpassed all that I had seen before. His house (large, commodious and handsome) stands about two hundred yards from the turnpike road, leading from Philadelphia to New-York, looks on and over the Delaware, which runs parallel with the road, and has, surrounding it, and at the back of it, five hundred acres of land, level as a lawn, and two feet deep in loam, that never requires a water-furrow. This was the finest sight that I ever saw as to farm buildings and land.—I forgot to observe, that I saw, in Mr. TAYLOR's service, another man, recently arrived from England. A Yorkshire man. He, too, wished to see me. He had got some of my "*little books*," which he had preserved, and brought out with him. Mr. TAYLOR was much pleased with him. An active, smart man; and, if he follow my advice, to remain *a year* under one roof, and save his wages, he will, in a few

years, be a rich man.—These men must be brutes indeed not to be sensible of the great kindness and gentleness and liberality, with which they are treated.—Mr. TAYLOR came, this morning, to Mr. NEWBOLD's, and brought me on to TRENTON.—I am at the Stage Tavern, where I have just dined upon cold ham, cold veal, butter, cheese, and a peach-pye; nice clean room, well furnished, waiter clean and attentive, plenty of milk; and charge *a quarter of a dollar!* I thought, that Mrs. JOLINE at Princeton, (as I went on to Philadelphia), Mrs. BEULER at Harrisburgh, Mr. SLAYMAKER at Lancaster, and Mrs. M'ALLISTER, were low enough in all conscience; but, really, this charge of Mrs. ANDERSON beats all. I have not had the face to pay the waiter a quarter of a dollar; but have given him half a dollar, and told him to keep the change. He is a Black man. He thanked me. But, they never *ask* for any thing.—But, my vehicle is come, and now I bid adieu to Trenton, which I should have liked better, if I had not seen so many young fellows lounging about the streets and leaning against door posts, with quids of tobacco in their mouths, or segars stuck between their lips, and with dirty hands and faces. Mr. Birkbeck's complaint, on this score, is perfectly just.

Brunswick, New-Jersey.—Here I am after a ride of about 30 miles, since two o'clock, in what is called a Jersey-wagon, through such *mud* as I never saw before. Up to the stock of the wheel; and yet a pair of very little horses have dragged us through it in the space of *five hours*. The best

horses and driver and the worst roads I ever set my eyes on. This part of Jersey is a sad spectacle after leaving the brightest of all the bright parts of Pennsylvania. My driver, who is a Tavern-keeper himself, would have been a very pleasant companion, if he had not drunk so much spirits on the road. This is the *great misfortune* of America! As we were going up a hill very slowly, I could perceive him looking very hard at my cheek for some time. At last, he said: "I am "wondering, Sir, to see you look so *fresh* "and so *young*, considering what you "have gone through in the world;" for, though I cannot imagine *how*, he had learnt who I was. "I'll tell you," said I, "how I have contrived the thing. I "rise early, go to bed early, eat sparingly, "never drink any thing stronger than "small beer, shave once a day, and wash "my hands and face clean three times a "day at the very least." He said, that was *too much* to think of doing.

March 12. Warm and fair. Like an English *first of May* day in point of warmth.—I got to Elizabeth Town Point through beds of mud. Twenty minutes too late for the Steam-boat. Have to wait here at the Tavern 'till to-morrow. Great mortification. Supped with a Connecticut farmer, who was taking on his daughter to Little York in Pennsylvania. The rest of his family he took on in the fall. He has *migrated*. His reasons were these: He has *five sons*, the eldest 19 years of age, and several daughters. Connecticut is thickly settled. He has not the means to buy farms for the sons there. He, there-

fore, goes and gets cheap land in Pennsylvania; his sons will assist him to clear it; and, thus, they will have a farm each. To a man in such circumstances, and "born with an axe in one hand and a gun in the other," the Western Countries are desirable; but not to *English farmers*, who have great skill in fine cultivation, and who can purchase near New-York or Philadelphia. This YANKEY (the inhabitants of Connecticut, Rhode Island, Massachusetts and New Hampshire, only are called *Yankeys*) was about the age of SIR FRANCIS BURDETT, and, if he had been dressed in the usual clothes of Sir Francis, would have passed for him. Features, hair, eyes, height, make, manner, look, hasty utterance at times, musical voice, frank deportment, pleasant smile. All the very fac-similie of him. I had some early York Cabbage seed and some Cauliflower seed in my pocket, which had been sent me from London, in a Letter, and which had reached me at Harrisburgh. I could not help giving him a little of each.

March 13. Same weather.—A fine open day. Rather a cold May-day for England.—Came to New-York by the Steam-Boat. Over to this Island by another, took a little light wagon, that *wisked* me home over roads as dry and as smooth as gravel walks in an English Bishop's garden in the month of July. Great contrast with the bottomless muds of New Jersey! As I came along saw those fields of rye, which were so green in December, now *white*. Not a single sprig of *green* on the face of the earth.—Found that my man had

ploughed ten acres of ground.—The frost not quite clean out of the ground. It has penetrated *two feet eight inches.*—The weather here has been nearly about the same as in Pennsylvania ; only *less snow*, and *less rain.*

March 14. Open weather. Very fine.—Not quite so warm.

15. Same weather.--*Young chickens.*---I hear of no other in the neighbourhood. This the effect of my *warm fowl-house.* The house has been supplied with eggs *all the winter*, without any interruption. I am told, that this has been the case at no other house hereabouts.—We have *now* an abundance of eggs. More than a large family can consume. We send some to market. The fowls, I find, have wanted *no* feeding except during snow, or, in the very, very cold days ; and, in those very cold days, they *did not come out of their house all the day.* A certain proof, that they like the warmth.

16. Little frost in the morning. Very fine day.

17. Precisely same weather.

18. Same weather.

19. Same weather.

20. Same weather. Opened several pits, in which I had preserved all sorts of garden plants and roots, and apples. Valuable experiments. As useful in England as here, though not so absolutely necessary. I shall communicate these in another part of my work, under the head of *Gardening.*

21. Same weather. The day like a fine May-day in England. I am writing without fire, and in my waistcoat without coat.

March 22. Rain all last night, and all this day.

23. Mild and fine. A sow had a litter of pigs *in the leaves under the trees.* Judge of the weather by this. The wind blows cold; but, she has drawn together great heaps of leaves, and protects her young with surprising sagacity and exemplary care and fondness.

24. Same weather.

25. Still mild and fair.

26. Very cold wind. We try to get the sow and pigs into the buildings. But the pigs do not follow, and we cannot, with all our temptations of corn and all our caresses, get the sow to move without them by her side. She must remain 'till they choose to travel. How does nature, through the conduct of this animal, reproach those mothers, who cast off their new-born infants to depend on a hireling's breast! Let every young man, before he marry, read, upon this subject, the pretty poem of Mr. ROSCOE, called "the NURSE;" and, let him also read, on the same subject, the eloquent, beautiful, and soul-affecting passage, in Rousseau's "*Emile.*"

27. Fine warm day. Then high wind, rain, snow, and hard frost before morning.

28. Hard frost. Snow 3 inches deep.

29. Frost in the night; but, all thawed in the day, and very warm.

30. Frost in night. Fine warm day.

31. Fine warm day.—As the *winter* is now gone, let us take a look back at its *inconveniences* compared with those of an *English Winter.*—We have had *three* months of it; for, if we had a few days sharp in December, we have had ma-

ny very fine and *without fire* in March. In England winter really begins in November, and does not end 'till mid-March. Here we have *greater cold;* there four times as much *wet*. I have had my great coat on only *twice*, except when sitting in a *stage* travelling. I have had *gloves* on no oftener; for, I do not, like the Clerks of the Houses of Boroughmongers, *write in gloves*. I seldom meet a wagoner with gloves or great coat on. It is generally *so dry*. This is the great friend of man and beast. Last summer *I wrote home for nails, to nail my shoes for winter*. I could find none here. What a foolish people not to have shoe-nails! I forgot, that it was likely, that the absence of shoe-nails argued *an absence of the want of them*. The nails are not come; and I have not wanted them. There is *no dirt* except for about *ten days at the breaking up of the frost*. The dress of a labourer does not cost *half* so much as in England. This *dryness* is singularly favourable to all animals. They are hurt far less by *dry cold* than by *warm drip, drip, drip*, as it is in England. —There has been nothing *green* in the *garden*, that is to say, *above ground*, since December; but, we have had, all winter, and have now, *white cabbages, green savoys, parsnips, carrots, beets, young onions, radishes, white turnips, Swedish turnips*, and *potatoes;* and all these in the greatest abundance (except *radishes*, which were a few *to try*), and always *at hand* at a minute's warning. The modes of preserving will be given in another part of the work. What can any

body want *more* than these things in the garden way? However, it would be very easy to add to the catalogue. Apples, quinces, cherries, currants, peaches, *dried in the summer*, and excellent for tarts, and pies. Apples in their raw state as many as we please. My own stock being gone, I have *trucked* turnips for apples; and shall thus have them, if I please, 'till apples come again on the trees. I give two bushels and a half of Swedish Turnips for one of Apples; and, mind, this is on the *last day of March*.—I have here stated *facts*, whereby to judge of the winter; and I leave the English reader to judge for himself, I myself decidedly preferring the American Winter.

April 1. Very fine and warm.
2. Same weather.
3. Same weather.
4. Rain all day.
5. Rain all day. Our cistern and pool full.
6. Warm, but no sun.—Turkeys begin to lay.
7. Same weather. My first spring operations in gardening are now going on; but I must reserve an account of them for another Part of my work.
8. Warm and fair.
9. Rain and rather cold.
10. Fair but cold. It rained but yesterday, and we are, to-day, feeding sheep and lambs with *grains of Corn*, and with *Oats*, upon the *ground* in the Orchard. Judge, then, of the cleanness and convenience of this soil!
11. Fine and warm.
12. Warm and fair.
13. Warm and fair.

April 14. Drying wind and miserably cold. Fires again in daytime, which I have not had for some days past.

15. Warm, like a fine May-day in England. We are planting out selected roots for seed.

16. Rain all last night.—Warm. Very fine indeed.

17. Fine warm day. Heavy thunder and rain at night. The *Martins* (not swallows) *are come* into the barn, and are looking out sites for the habitations of their future young ones.

18. Cold and raw. Damp, too, which is extremely rare. The worst day I have yet seen during the year. Stops the grass, stops the swelling of the buds. The young chickens hardly peep out from under the wings of the hens. The lambs don't play, but stand *knit up*. The pigs growl and squeak; and the birds are gone away to the woods again.

19. Same weather, with an Easterly wind. Just such a wind as that, which, in March, brushes round the corners of the streets of London, and makes the old, muffled-up debauchees hurry home with aching joints. —Some hail to-day.

20. Same weather. Just the weather to give drunkards the "blue devils."

21. Frost this morning. Ice as thick as a dollar.—Snow three times. Once to cover the ground. Went off again directly.

22. Frost and ice in the morning. A very fine day, but not warm.—*Dandelions in bloom.*

23. Sharp white frost in morning. Warm and fine day.

24. Warm night, warm and fair day. And *here I close my Journal;* for, I am in haste to get my manuscript away; and there now wants only *ten days* to complete the year.—I resume, now, the *Numbering* of my *Paragraphs*, having begun my Journal at the close of Paragraph No. 20.

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21. Let us, now, take a survey, or rather glance, at the face which nature now wears. The grass begins to afford a good deal for sheep and for my grazing English pigs, and the cow and oxen get a little food from it. The pears, apples, and other fruit trees have not made much progress in the swelling or bursting of their buds. The buds of the Weeping willow have *bursted* (for, in spite of that conceited ass, Mr. James Perry, *to burst* is a *regular verb*, and vulgar pedants only make it irregular,) and those of a *Lilac*, in a warm place, are almost *bursted*, which is a great deal better than to say, "almost *burst*." Oh, the coxcomb! As if an obsolete pedagogue like him could injure me by his *criticisms!* And, as if an error like this, even if it had been one, could have any thing to do with my capacity for developing principles, and for simplifying things, which, in their nature, are of great complexity!—The oaks, which, in England, have now their sap in *full flow*, are here quite unmoved as yet. In the gardens in general there is *nothing green*, while in England, they have *broccoli* to eat, early cabbages planted out, coleworts to eat, peas four or six inches high. Yet, we shall have *green peas* and *loaved cabbage as soon as they will*. We have *sprouts* from the cabbage stems preserved under cover; the Swedish turnip is giving me *greens* from bulbs planted out in March;

and I have some *broccoli too*, just coming on for use. *How* I have got this broccoli I must explain in my *Gardener's Guide;* for write one I must. I never can leave this country without an attempt to make every farmer a gardener.—In the meat way, we have beef, mutton, bacon, fowls, a calf to kill in a fortnight's time, sucking pigs when we choose, lamb nearly fit to kill; and all of our own breeding or our own feeding. We kill an ox, send three quarters and the hide to market and keep one quarter. Then a sheep, which we dispose of in the same way. The bacon is always ready. Some fowls always fatting. Young ducks are just coming out to meet the green peas.—Chickens (the earliest) as big as American Partridges (misnamed quails), and ready for the asparagus, which is just coming out of the ground. Eggs at all times more than we can consume. And, if there be any one, who wants *better* fare than this, let the grumbling glutton come to that poverty, which SOLOMON has said shall be his lot. And, the *great thing of all*, is, that here, *every man*, even every labourer, may live as well as this, if he will be *sober* and *industrious*.

22. There are *two things*, which I have not yet mentioned, and which are almost wholly wanting here, while they are so amply enjoyed in England. The *singing birds* and the *flowers*. Here are many birds in summer, and some of very beautiful plumage. There are some wild flowers, and some English flowers in the best gardens. But, generally speaking, they are birds without song, and flowers without smell. The *linnet* (more than a thousand of which I have heard warbling upon one scrubbed oak on the sand hills in Surrey), the *skylark*, the *gold-finch*, the *wood-lark*, the *nightingale*, the *bull-finch*, the *black-bird*, the *thrush*, and all the rest of the singing tribe are wanting in these beautiful woods and orchards of garlands. When

these latter have dropped their bloom, all is gone in the flowery way. No *shepherd's rose*, no *honey-suckle*, none of that endless variety of beauties that decorate the hedges and the meadows in England. No *daisies*, no *primroses*, no *cowslips*, no *blue-bells*, no *daffodils*, which, as if it were not enough for them to charm the sight and the smell, must have names, too, to delight the ear. All these are wanting in America. Here are, indeed, birds which bear the *name* of robin, black-bird, thrush and gold-finch; but, alas! the thing at Westminster has, in like manner the *name* of parliament, which speaks the voice of the people, whom it pretends to represent, in much about the same degree that the black-bird here speaks the voice of its name-sake in England.

23. Of *health*, I have not yet spoken, and, though it will be a subject of remark in another part of my work, it is a matter of too deep interest to be wholly passed over here. In the first place, as to *myself*, I have always had excellent health; but, during a year, in England, I used to have a *cold* or two; a trifling sore throat; or something in that way. *Here*, I have neither, though I was more than two months of the winter travelling about, and sleeping in different beds. My family have been more healthy than in England, though, indeed, there has seldom been any serious illness in it. We have had but *one visit from any doctor*. Thus much, for the present, on this subject. I said, in the second Register I sent home, that this climate was *not so good as that of England*. Experience, observation, a careful attention to *real facts*, have convinced me that it is, *upon the whole*, a better climate; though I tremble lest the tools of the Boroughmongers should cite this as a new and most flagrant proof of my *inconsistency*. England is my country, and to England I shall return. I like it best, and shall always

like it best; but, then, in the word *England*, many things are included besides climate and soil and seasons and eating and drinking.

24. In the *Second Part* of this work, which will follow the First Part, in the course of two months, I shall take particular pains to detail all that is within my knowledge, which I think likely to be useful to persons who intend coming to this country from England. I shall state every particular of the expense of supporting a family, and show what are the means to be obtained for that purpose, and how they are to be obtained. My intending to return to England ought to *deter* no one from coming hither; because, I was resolved, if I had life, to return, and I expressed that resolution before I came away. But, if there are good and virtuous men, who can do no good there, and who, by coming hither, can withdraw the fruits of their honest labour from the grasp of the Borough tyrants, I am bound, if I speak of this country at all, to tell them the real truth; and this, as far as I have gone, I have now done.

CHAP. II.

RUTA BAGA.

CULTURE, MODE OF PRESERVING, AND USES OF THE RUTA BAGA, SOMETIMES CALLED THE RUSSIA, AND SOMETIMES THE SWEDISH TURNIP.

Description of the Plant.

25. It is my intention, as notified in the public papers, to put into print an account of all the experiments which I have made, and shall make, in Farming and in Gardening upon this Island. I, several years ago, long before tyranny showed its present horrid front in England, formed the design of sending out, to be published in this country, a treatise on the cultivation of the root and green crops, as cattle, sheep, and hog food. This design was suggested by the reading of the following passage in Mr. CHANCELLOR LIVINGSTON's *Essay on Sheep*, which I received in 1812. After having stated the most proper means to be employed in order to keep sheep and lambs, during the winter months, he adds: "Having brought our flocks "through the winter, we now come to the most "critical season, that is, the latter end of March "and the month of April. At this time the ground "being bare, the sheep will refuse to eat their hay, "while the scanty picking of grass, and its purga-"tive quality, will disable them from taking the "nourishment that is necessary to keep them up. "If they fall away their wool will be injured, and "the growth of their lambs will be stopped, and "even many of the old sheep will be carried off "by the dysentery. *To provide food for this sea-*

" *son is very difficult.* *Turnips* and *Cabbage* will " *rot*, and bran they will not eat after having been " fed on it during the winter. *Potatoes*, however, " and the *Swedish Turnip*, called *Ruta Baga*, may " be usefully applied at this time, and so, I think, " might *Parsnips* and *Carrots*. But, as few of us " are in the habit of cultivating these plants to the " extent which is necessary for the support of a " large flock, we must *seek resources more within* " *our reach*." And then the Chancellor proceeds to recommend the leaving the *second growth of clover uncut*, in order to produce early shoots from sheltered buds for the sheep to eat until the coming of the natural grass and the general pasturage.

26. I was much surprised at reading this passage ; having observed, when I lived in Pennsylvania, how prodigiously the root-crops of every kind flourished and succeeded with only common skill and care ; and, in 1815, having by that time had many crops of Ruta Baga exceeding *thirty tons*, or about *one thousand five hundred heaped bushels to the acre*, at Botley, I formed the design of sending out to America a treatise on the culture and uses of that root, which, I was perfectly well convinced, could be raised with more ease here than in England, and, that it might be easily preserved during the whole year, if necessary, I had proved in many cases.

27. If Mr. Chancellor Livingston, whose public-spirit is manifested fully in his excellent little work, which he modestly calls an *Essay*, could see my Ewes and Lambs and Hogs, and Cattle, at this " *critical season*" (I write on the 27th of March), with more Ruta Baga at their command than they have mouths to employ on it ; if he could see me, who am on a poor and exhausted piece of land, and who found it covered with weeds and brambles in the month of June last ; who found no manure and who have bought none ; if he could see me over-

stocked, not with mouths, but with food, owing to a little care in the cultivation of this invaluable Root, he would, I am sure, have reason to be convinced, that, if any farmer in the United States is in want of food at this pinching season of the year, the fault is neither in the soil nor in the climate.

28. It is, therefore, of my mode of cultivating this Root in this Island that I mean, at present to treat; to which matter I shall add, in another PART of my work, an account of my experiments as to the MANGLE WURTZLE, or SCARCITY ROOT; though, as will be seen, I deem that root, except in particular cases, of very inferior importance. The Parsnip, the Carrot, the Cabbage, are all excellent in their kind and in their uses; but, as to these, I have not yet made, upon a scale sufficiently large here, such experiments as would warrant me in speaking with any great degree of confidence. Of these and other matters I propose to treat in a future PART, which I shall, probably, publish towards the latter end of this present year.

29. The *Ruta Baga* is a sort of Turnip well known in the State of New York, where, under the name of *Russia* Turnip, it is used for the table from February to July. But, as it may be more of a stranger in other parts of the country, it seems necessary to give it enough of description to enable every reader to distinguish it from every other sort of Turnip.

30. The leaf of every other sort of Turnip is of a *yellowish* green, while the leaf of the Ruta Baga is of a *bluish* green, like the green of peas when of nearly their full size, or like the green of a young and thrifty early Yorkshire Cabbage. Hence it is, I suppose, that some persons have called it the *Cabbage-Turnip*. But, the characteristics the most decidedly distinctive are these: that the outside of the *bulb* of the Ruta Baga is of a greenish hue mixed towards the top, with a colour bordering on a

red; and, that the inside of the bulb, if the sort be true and pure, is of a *deep yellow*, nearly as deep as that of gold.

Mode of saving and of preserving the Seed.

31. This is rather a nice business, and should be, by no means, executed in a negligent manner. For, on the well-attending to this, much of the success depends; and, it is quite surprising how great losses are, in the end, frequently sustained by the saving, in this part of the business, of an hour's labour or attention. I, one year, lost more than half of what would have been an immense crop, by a mere piece of negligence in my bailiff as to the seed, and I caused a similar loss to a gentleman in Berkshire, who had his seed from the same parcel that mine was taken, and who had sent many miles for it, in order to have the *best in the world.*

32. The Ruta Baga is apt to *degenerate*, if the seed be not saved with care. We, in England, *select* the plants to be saved for seed. We examine well to find out those that run least into *neck* and *green.* We reject all such as approach at all towards a *whitish* colour, or which are even of a *greenish* colour *towards the neck*, where there ought to be a little *reddish cast.*

33. Having selected the plants with great care, we take them up out of the place where they have grown, and plant them in a plot distant from every thing of the Turnip or Cabbage kind which is to bear seed. In this Island, I am now, at this time, planting mine for seed (27th March), taking all our English precautions. It is probable, that they would do very well, if taken out of *a heap* to be transplanted, if well selected; but, lest this should not do well, I have kept my selected plants all the

winter in the ground in my garden well covered with corn stalks and leaves from the trees ; and, indeed, this is so very little a matter to do, that it would be monstrous to suppose, that any farmer would neglect it on account of the labour or trouble ; especially when we consider, *that the seed of two or three turnips is more than sufficient to sow an acre of land.* I, on one occasion, planted *twenty* turnips for seed, and the produce, besides what the little birds took as their share for having kept down the caterpillars, was *twenty-two and a half pounds of clean seed.*

34. The sun is so ardent and the weather so fair here, compared with the drippy and chilly climate of England, while the birds here never touch this sort of seed, that a small plot of ground would, if well managed, produce a great quantity of seed. Whether it would *degenerate* is a matter that I have not *yet* ascertained ; but which I am about to ascertain this year.

35. That all these precautions of *selecting the plants* and *transplanting* them are necessary I know by experience. I, on one occasion, had sown all my own seed, and the plants had been carried off by the *fly*, of which I shall have to speak presently. I sent to a person who had raised some seed, which I afterwards found had come from turnips left promiscuous to go to seed in a part of a field where they had been sown. The consequence was, that a good *third part* of my crop had no *bulbs ;* but consisted of a sort of *rape*, all leaves and stalks growing very high, while even the rest of the crop bore no resemblance, either in point of size or of quality to turnips in the same field, from seed saved in a proper manner, though this latter was sown at a later period.

36. As to the *preserving* of the seed, it is an invariable rule applicable to all seeds, that seed, *kept in the pod* to the very time of sowing, will

vegetate more quickly and more vigorously than seed which has been sometime threshed out. But, turnip seed will do very well, if threshed out as soon as ripe, and kept in *a dry place*, and not too much exposed to the air. A bag, hung up in a dry room is the depository that I use. But, before being threshed out, the seed should be quite ripe, and, if cut off, or pulled up, which latter is the best way, before the pods are quite dead, the whole should be suffered to lie in the sun 'till the pods are perfectly dead, in order that the seed may imbibe its full nourishment and come to complete perfection; otherwise the seed will *wither*, much of it will not grow at all, and that which does grow will produce plants far inferior to those proceeding from well ripened seed.

Time of Sowing.

37. Our *time of sowing* in England is from the first to the twentieth of June, though some persons sow in May, which is still better. This was one of the matters of the most deep interest with me, when I came to Hyde Park. I could not begin before the month of June: for I had no ground ready. But, then, I began with great care, on the 2d of June, sowing, in small plots, *once every week*, 'till the 30th of July. In *every case* the seed took well and the plants grew well; but, having looked at the growth of the plots, first sown, and calculated upon the probable advancement of them, I fixed upon the *26th of June* for the sowing of my principal crop.

38. I was particularly anxious to know, whether this country were cursed with the *Turnip Fly*, which is so destructive in England. It is a little insect about the size of a *bed-flea*, and jumps away from

all approachers exactly like that insect. It abounds, at sometimes, in quantities so great as to eat up all the young plants on hundreds and thousands of acres in a single day. It makes its attack when the plants are in the *seed-leaf;* and, it is so very generally prevalent, that it is always an even chance, at least, that every field that is sown will be thus wholly destroyed. There is no remedy but that of ploughing and sowing again ; and this is frequently repeated *three times*, and even then, there is no crop. Volumes upon volumes have been written on the means of preventing, or mitigating, this calamity ; but nothing effectual has ever been discovered ; and, at last, the *only* means of *insuring* a crop of Ruta Baga in England, is, to raise the plants in small plots, sown at many different times, in the same manner as cabbages are sown, and, like cabbages, *transplant them ;* of which mode of culture I shall speak by and by. It is very singular, that a field sown *one day*, wholly escapes, while a field, sown the *next day*, is wholly destroyed. Nay, a part of the same field, sown in the morning, will sometimes escape, while the part, sown in the afternoon, will be destroyed ; and, sometimes the afternoon sowing is the part that is spared. To find a remedy for this evil has posed all the heads of all the naturalists and chemists of England. As an evil, the smut in wheat ; the wire-worm ; and the grubs above ground and under ground ; the caterpillars green and black ; the slug red, black and gray ; though each a great tormentor, are nothing. Against all these there is *some remedy*, though expensive and plaguing ; or, at any rate, their ravages are comparatively slow, and their *causes are known*. But, the *turnip-fly* is the English farmer's evil genius. To discover a remedy for, or the cause of, this plague has been the object of inquiries, experiments, analysises, innumerable. Premium upon premium offered

have only produced pretended remedies, which have led to disappointment and mortification; and, I have no hesitation to say, that, if any man could find out a real remedy, and could communicate the means of cure, while he kept the nature of the means a secret, he would be a much richer man than he who should discover the longitude; for about *fifty thousand* farmers would very cheerfully pay him *ten guineas a year each.*

39. The reader will easily judge, then, of my anxiety to know, whether this mortal enemy of the farmer existed in Long Island. This was the first question, which I put to every one of my neighbours, and I augured good, from their not appearing to understand what I meant. However, as my little plots of turnips came up successively, I watched them as our farmers do their fields in England. To my infinite satisfaction I found that my alarms had been groundless. This circumstance, besides others that I have to mention by and by, gives to the stock-farmer in America so great an advantage over the farmer in England, or in any part of the middle and northern parts of Europe, that it is truly wonderful that the culture of this root has not, long ago, become general in this country.

40. The *time of sowing*, then, may be, as circumstances may require, *from the 25th of June to about the 10th of July;* as the result of my experiments will now show. The plants sown during the first fifteen days of June grew well and attained a great size and weight; but, though they did not actually *go off to seed,* they were very little short of so doing. They rose into long and large necks and sent out sprouts from the upper part of the bulb; and, then, the bulb itself (which is the thing sought after) swelled no more. The substance of the bulb became hard and stringy; and the turnips, upon the whole, were smaller and of greatly

inferior quality, compared with those, which were sown at the proper time.

41. The turnips sown between the 15th and 26th of June, had all these bad appearances and quality, only in a less degree. But, those, which were sown on the 26th of June, were perfect in shape, size, and quality; and though I have grown them larger in England, it was not done without more manure upon half an acre than I scratched together to put upon seven acres at Hyde Park; but, of this I shall speak more particularly when I come to the *quantity of crop*.

42. The sowings which were made after the 26th of June and before the 10th of July, did very well; and, one particular sowing on the 9th of July, on 12 rods, or perches, of ground, sixteen and a half feet to the rod, yielded 62 bushels, leaves and roots cut off, which is after the rate of 992 bushels to an acre. But this sowing was on ground extremely well prepared and sufficiently manured with ashes from *burnt earth;* a mode of raising manure of which I shall fully treat in a future Chapter.

43. Though this crop was so large, sown on the 9th of July, I would by no means recommend any farmer, who can sow sooner, to defer the business to that time; for, I am of opinion with the old folk in the West of England, that God is almost always on the side of *early* farmers. Besides, one delay too often produces another delay; and he who puts off to the 9th, may put off to the 19th.

44. The crops, in small plots, which I sowed after the 9th of July to the 30th of that month, *grew* very well; but they regularly succeeded each other in diminution of size; and, which is a great matter, the cold weather overtook them before they were *ripe;* and ripeness is full as necessary in the case of roots as in the case of apples or of peaches.

Quality and Preparation of the Land.

45. As a fine, rich, loose, garden mould, of great depth, and having a porous stratum under it, is best for every thing that vegetates, except plants that live best in water, so it is best for Ruta Baga. But I know of *no* soil in the United States, in which this root may not be cultivated with the greatest facility. A *pure sand*, or a *very stiff clay*, would not do well certainly; but I have never seen any of either in America. The soil that I cultivate is *poor* almost proverbially; but, what it really is, is this: it is a light loam, approaching towards the *sandy*. It is of a brownish colour about eight inches deep, then becomes more of a *red* for about another eight inches; and then comes a mixture of a yellowish sand and of pebbles, which continues down to the depth of many feet.

46. So much for the *nature* of the land. As to its *state*, it was that of as complete *poverty* as can well be imagined. My main crop of Ruta Baga was sown upon two different pieces. One of about three acres, had borne, in 1816, some Indian Corn *Stalks* together with immense quantities of brambles, grass, and weeds, of all descriptions. The other, of about four acres, had, when I took to it, *Rye* growing on it; but, this Rye was so poor, that my neighbour assured me, that it could produce nothing, and he advised me to let the cattle and sheep take it for their trouble of walking over the ground; which advice I readily followed; but, when he heard me say, that I intended to sow Russia Turnips on that same ground, he very kindly told me his opinion of the matter, which was, that I should certainly throw my labour wholly away.

47. With these two pieces of ground I went to work early in June. I ploughed them *very shallow*, thinking to drag the grassy clods up with the

harrow, to put them in heaps and burn them, in which case I would (barring the *fly !*), have pledged my life for a crop of Ruta Baga. It adversely happened to *rain* when my clods should have been burnt, and the furrows were so solidly fixed down by the rain, that I could not tear them up with the harrow; and, besides, my *time of sowing* came on apace. Thus situated, and having no faith in what I was told about the *dangers* of *deep ploughing*, I fixed four oxen to a strong plough, and turned up soil that had not seen the sun for many, many long years. Another soaking rain came very soon after, and went, at once, to the bottom of my ploughing, instead of being carried away instantly by evaporation. I then harrowed the ground down level, in order to keep it *moist* as long as I could; for the sun now began to be the thing most dreaded.

48. In the meanwhile I was preparing my *manure*. There was nothing of the kind visible upon the place. But, I had the good luck to follow a person, who appears not to have known much of the use of *brooms*. By means of sweeping and raking and scratching in and round the house, the barn, the stables, the hen roost, and the court and yard, I got together about *four hundred bushels* of not very bad turnip manure. This was not quite 60 bushels to an acre for my seven acres; or, THREE GALLONS to every square rod.

49. However, though I made use of these beggarly means, I would not be understood to recommend the use of such means to others. On the contrary, I should have preferred good and clean land and plenty of manure; but, of this I shall speak again, when I have given an account of the Manner of *Sowing* and of Transplanting.

Manner of Sowing.

50. Thus fitted out with land and manure, I set to the work of sowing, which was performed, with the help of two ploughs and two pair of oxen, on the 25th, 26th, and 27th of June. The ploughman put the ground up into little *ridges*, having *two furrows on each side of the ridge;* so that every ridge consisted of four furrows, or turnings over of the plough; and the tops of the ridges were about *four feet* from each other; and, as the ploughing was performed to a great depth, there was, of course, a very deep gutter between every two ridges.

51. I took care to have the manure placed so as to be *under the middle* of each ridge; that is to say, just beneath where my seed was to come. I had but a very small quantity of seed as well as of manure. This seed I had, however, brought from home, where it was raised by a neighbour, on whom I could rely, and I had no faith in any other. So that I was compelled to bestow it on the ridges with a very parsimonious hand, not having, I believe, more than four pounds to sow on the seven acres. It was sown principally in this manner: a man went along by the side of each ridge, and put down two or three seeds in places at about *ten inches* from each other, just drawing a little earth over, and *pressing it on the seed*, in order to make it vegetate quickly before the earth became *too dry*. This is always a good thing to be done, and especially in dry weather and under a hot sun. Seeds are very small things; and though, when we see them covered over with the earth, we conclude that the earth *must touch them closely*, we should remember, that a very *small cavity* is sufficient to keep them untouched nearly all round, in which case, under a hot sun, and near the surface, they

are sure to perish, or, at least, to lie long, and until rain come, before they start.

52. I remember a remarkable instance of this in sowing some turnips to transplant at Botley. The whole of a piece of ground was sown *broadcast*. My gardener had been told to sow in *beds*, that we might go in to weed the plants; and, having forgotten this 'till after sowing, he clapped down his line, and divided the plot into beds by *treading very hard* a little path at the distance of every four feet. The weather was very dry, and the wind very keen. It continued so for three weeks; and, at the end of that time, we had scarcely a turnip in the beds, where the ground had been left raked over; but, in the *paths* we had an abundance, which grew to be very fine, and which, when transplanted, made part of a field which bore *thirty-three tons to the acre*, and which, as a *whole field*, was the first field I ever saw in my life.

53. I cannot help endeavouring to press this fact upon the reader. Squeezing down the earth makes it touch the seed in all its parts, and then it will soon vegetate. It is for this reason, that barley and oat fields should be *rolled*, if the weather be dry; and, indeed, that all seeds should be pressed down, if the state of the earth will admit of it.

54. This mode of sowing is neither tedious nor expensive. Two men sowed the whole of my seven acres in the three days, which, when we consider the value of the crop, and the saving in the after culture, is really not worth mentioning. I do not think, that any sowing by drill is so good, and, in the end, so cheap, as this. Drills miss very often in the sowings of such small seeds. However, the thing may be done by hand in a less precise manner. One man would have sown the seven acres in a day, by just scattering the seeds along on the top of the ridge, where they might have been buried with a rake, and pressed down by a

spade or shovel or some other flat instrument. A slight roller to take two ridges at once, the horse walking in the gutter between, is what I used to make use of when I sowed on ridges; and, who can want such a roller in America, as long as he has an axe and an auger in his house? Indeed this whole matter is such a trifle, when compared with the importance of the object, that it is not to be believed, that any man will think it worth the smallest notice as counted amongst the means of obtaining that object.

55. *Broad-cast sowing* will, however, probably, be, in most cases, preferred; and, this mode of sowing is pretty well understood from general experience. What is required here are, that the ground be well ploughed, finely harrowed, and the seeds thinly and evenly sown over it, to the amount of about two pounds of seed to an acre; but, then, if the weather be dry, the seed should, by all means, be *rolled* down. When I have spoken of the *after culture*, I shall compare the two methods of sowing: the *ridge* and the *broad-cast*, in order that the reader may be the better able to say, which of the two is entitled to the preference.

After Culture.

56. It relating to what I did in this respect, I shall take it for granted, that the reader will understand me as describing what I think ought to be done.

57. When my ridges were laid up, and my seed was sown, my neighbours thought, that there was an end of the process; for, they all said, that, if the seed ever came up, being upon those high ridges, the plants never could live under the scorching of the sun. I knew, that this was an erroneous notion; but, I had not much confidence in the

powers of the soil, poor as it evidently was, and scanty as was my supply of manure.

58. The plants, however, made their appearance with great regularity ; no *fly* came to annoy them. The moment they were fairly up, we went with a very small hoe and took out all but one in each ten or eleven or twelve inches, and thus left them singly placed. This is a great point ; for they begin to rob one another at a very early age ; and, if left two or three weeks to rob each other, before they are set out singly, the crop will be diminished one half. To set the plants out in this way was a very easy and quickly-performed business ; but, it is a business to be left to no one but a careful man. Boys can never safely be trusted with the deciding, at discretion, whether you shall have a large crop or a small one.

59. But, now, something else began to appear as well as turnip-plants ; for, all the long grass and weeds having dropped their seeds the summer before, and, probably, for many summers, they now came forth to demand their share of that nourishment, produced by the fermentation, the dews, and particularly by the *Sun*, which shines on all alike. I never saw a fiftieth part of so many weeds in my life upon a like space of ground. Their little seed leaves, of various hues, formed a perfect mat on the ground. And now it was, that my *wide ridges*, which had appeared to my neighbours to be so very singular and so unnecessary, were absolutely necessary. First we went with a hoe, and hoed the *tops of the ridges*, about six inches wide. There were all the plants, then, clear and clean at once, with an expense of about half a day's work to an acre. Then we came, in our Botley fashion, with a single horse plough, took a furrow from the side of one ridge going up the field, a furrow from the other ridge coming down, then another furrow from the same side of the first ridge going up, and

another from the same side of the other ridge coming down. In the taking away of the last two furrows, we went within *three inches* of the turnip-plants.—Thus there was a ridge over the original gutter. Then we turned these furrows *back again* to the turnips. And, having gone, in this manner, over the whole piece, there it was with not a weed alive in it. All killed by the sun, and the field as clean and as fine as any garden that ever was seen.

60. Those who know the effect of *tillage between growing plants*, and especially if the earth be *moved deep ;* and, indeed, what American does not know what such effect is, seeing that, without it, there would be no Indian Corn ; those that reflect on this effect, may guess at the effect on my Ruta Baga plants, which soon gave me by their appearance a decided proof, that TULL's principles are always true, in whatever soil or climate applied.

61. It was now a very beautiful thing to see, a regular, unbroken line of fine, fresh-looking plants upon the tops of those wide ridges, which had been thought to be so very whimsical and unnecessary. But, why have the ridges *so very wide?* This question was not new to me, who had to answer it a thousand times in England. It is because you cannot plough *deep* and *clean* in a narrower space than four feet ; and, it is the deep and clean ploughing that I regard as the surest means of a large crop, especially in poor, or indifferent ground. It is a great error to suppose, that there is any ground *lost* by these wide intervals. My crop of *thirty-three tons*, or, *thirteen hundred and twenty bushels*, to the acre, taking a whole field together, had the same sort of intervals, while my neighbours, with two feet intervals, never arrived at two-thirds of the weight of that crop. There is no *ground lost ;* for, any one who has a mind to do it, may satisfy himself, that the *lateral roots* of any fine large turnip will extend more than *six feet* from the

bulb of the plant. The intervals are full of these roots, the breaking of which and the moving of which, as in the case of Indian Corn, gives new food and new roots, and produces wonderful effects on the plants. Wide as my intervals were, the leaves of some of the plants very nearly touched those of the plants on the adjoining ridge, before the end of their growth; and I have had them frequently meet in this way in England. They would always do it here, if the ground were rich and the tillage proper. How, then, can the intervals be too wide, if the plants occupy the interval? And how can any ground be lost, if every inch be full of roots and shaded by leaves?

62. After the last-mentioned operation my plants remained till the weeds had again made their appearance; or, rather, 'till a new brood had started up, when this was the case, we went with the hoe again and cleaned the tops of the ridges as before. The weeds, under this all-powerful sun, instantly perish. Then we repeated the former operation with the one horse plough. After this nothing was done but to pull up now and then a weed, which had escaped the hoe; for, as to the plough share, nothing escapes that.

63. Now, I think no farmer can discover in this process any thing more difficult, more troublesome, more expensive, than in the process absolutely necessary to the obtaining of a crop of Indian Corn. And yet, I will venture to say, that, in any land, capable of bearing *fifty bushels* of Corn upon an acre, more than a thousand bushels of Ruta Baga may, in the above-described manner, be raised.

64. In the *Broad-Cast* method the after culture must, of course, be confined to *hoeing*, or, as TULL calls it, *scratching*. In England, the hoer goes in when the plants are about four inches high, and hoes all the ground, setting out the plants to about

eighteen inches apart; and, if the ground be at all foul, he is obliged to go in again in about a month afterwards, to hoe the ground again. This is all that is done; and a very poor all it is, as the crops, on the very best ground, compared with the ridged crops, invariably show.

Transplanting.

65. This is a third mode of cultivating the RUTA BAGA; and, in certain cases, far preferable to either of the two others. My *large* crops at Botley were from roots *transplanted.* I resorted to this mode in order to insure a crop in spite of the *Fly;* but, I am of opinion, that it is, in all cases, the best mode, provided *hands* can be obtained in sufficient number, just for a few days, or weeks, as the quantity may be, when the land and the plants are ready.

66. Much light is thrown on matters of this sort by describing what one has *done* one's-self relating to them. This is practice at once; or, at least, it comes much nearer to it than any instructions possibly can.

67. It was accident that led me to the practice. In the summer, of 1812, I had a piece of *Ruta Baga* in the middle of a field, or, rather, the piece occupied a part of the field, having a crop of carrots on the one side and a crop of mangle wurtzle on the other side. On the 20th of July the Turnips, or rather those of them which had escaped the Fly, began to grow pretty well. They had been sown in drills; and I was anxious to fill up the spaces, which had been occasioned by the ravages of the *Fly.* I, therefore, took the supernumerary plants, which I found in the unattacked

places, and filled up the rows by transplantation, which I did also in two other fields.

68. The Turnips, thus transplanted, *grew*, and in fact, were pretty good; but, they were very far inferior to those which had retained their original places. But, it happened, that on one side of the above-mentioned piece of turnips, there was a vacant space of about a yard in breadth. When the ploughman had finished ploughing between the rows of turnips, I made him plough up that spare ground very deep, and upon it I made my gardener go and plant two rows of turnips. *These* became the largest and finest of the whole piece, though transplanted two days later than those which had been transplanted in the rows throughout the piece. The cause of this remarkable difference I, at once, saw, was, that these had been put into *newly-ploughed ground;* for, though I had not read much of TULL at the time here referred to, I knew, from the experience of my whole life, that seeds as well as plants ought always to go into ground as recently moved as possible; because at every moving of the earth, and particularly at every turning of it, a new process of fermentation takes place, fresh exhalations arise, and a supply of the *food of plants* is thus prepared for the newly-arrived guests.—Mr. CURWEN, the Member of Parliament, though a poor thing as to public matters, has published not a bad book on *agriculture.* It is not bad, because it contains many authentic accounts of experiments made by himself; though I never can think of his book without thinking, at the same time, of the gross and scandalous plagiarisms, which he has committed upon TULL. Without mentioning particulars, the "*Honourable* Member" will, I am sure, know what I mean, if this page should ever have the honour to fall under his eye; and he will, I hope, repent, and give proof of his repentance, by a restoration of the property to the right owner.

69. However, Mr. CURWEN, in his book, gives an account of the wonderful *effects* of *moving the ground* between plants in rows; and he tells us of an experiment, which he made, and which proved, that from ground just ploughed, in a very dry time, an *exhalation* of *many tons* weight, per acre, took place, during the first twenty-four hours after ploughing, and of a less and less number of tons, during the three or four succeeding twenty-four hours; that, in the course of about a week, the exhalation *ceased*; and that, during the whole period, the ground, though in the *same field*, which had *not been ploughed* when the other ground was, exhaled *not an ounce!* When I read this in Mr. CURWEN's book, which was *before* I had read TULL, I called to mind, that, having once dug the ground between some rows of *part* of a plot of cabbages in my garden, in order to plant some late peas, I perceived (it was in a dry time) the cabbages, the next morning, in the part recently dug, with big *drops of dew* hanging on the edges of the leaves, and in the other, or undug part of the plot, no drops at all. I had forgotten the fact 'till I read Mr. CURWEN; and I never knew the *cause* 'till I read the real *Father of English Husbandry.*

70. From this digression I return to the history, first of my English transplanting. I saw, at once, that the only way to insure a crop of turnips was by *transplantation.* The next year, therefore, I prepared a field of *five acres* and another of *twelve.* I made *ridges,* in the manner described for sowing; and, on the 7th of June, in the first field, and on the 20th of July, in the second field, I planted my plants. I ascertained to an exactness, that there were *thirty-three tons to an acre*, throughout the whole seventeen acres. After this, I never used any other method. I never *saw* above *half* as great a crop in any other person's land; and, though we read of much greater in *agricultural*

prize reports, they must have been of the extent of *a single acre*, or something in that way. In my usual order, the ridges four feet asunder, and the plants *a foot* asunder on the ridge, there are *ten thousand*, *eight hundred and thirty* turnips on the acre of ground, and, therefore, for an acre to weigh *thirty-three tons*, each turnip must weigh very nearly *seven pounds*. After the time here spoken of, I had an acre or two at the end of a large field, transplanted on the 13th of July, which probably weighed *fifty tons an acre*. I delayed to have them weighed 'till a fire happened in some of my farm buildings, which produced a further delay, and so the thing was not done at all; but, I weighed *one wagon load*, the turnips of which *averaged eleven pounds each;* and, several weighed *fourteen* pounds each. My very largest upon Long Island weighed *twelve pounds and a half*. In all these cases, as well here as in England, the produce was from *transplanted* plants; though, at Hyde Park, I have many turnips of more than ten pounds weight each from *sown* plants, some of which, on account of the great perfection in their qualities, I have selected, and am now planting out, for seed.

71. I will now give a full account of my transplanting at Hyde Park. In a part of the ground, which was put into *ridges* and sown, I scattered the seed along very thinly upon the top of the ridge. But, however thinly you may attempt to *scatter* such small seeds, there will always be too many plants, if the tillage be good and the seed good also. I suffered these plants to stand as they came up; and, they stood much too long, on account of my want of hands, or, rather, my want of time to attend to give my directions in the transplanting; and, indeed, my *example* too; for, I met not with a man who knew how to *fix* a plant in the ground; and, strange as it may appear, more than half the bulk of crop depends on a little, trifling, contempti-

ble twist of the *setting stick*, or *dibble ;* a thing very well known to all gardeners in the case of cabbages, and about which, therefore, I will give, by and by, very plain instructions.

72. Thus puzzled, and not being able to spare time to do the job myself, I was one day looking at my poor plants, which were daily suffering for want of removal, and was thinking how glad I should be of one of the CHURCHER's at Botley, who, I thought to myself, would soon clap me out my turnip patch. At this very time, and into the field itself, came a cousin of one of these CHURCHERS, who had lately arrived from England ! It was very strange ; but literally the fact.

73. To work Churcher and I went, and, with the aid of persons to pull up the plants and bring them to us, we planted out about two acres, in the *mornings and evenings* of six days; for the weather was too hot for us to keep out *after breakfast*, until about two hours before sunset. There was a friend staying with me, who helped us plant, and who did, indeed, as much of the work as either Churcher or I.

74. The *time* when this was done was from the 21st to the 28th of *August*, one Sunday and one day of no planting, having intermitted. Every body knows, that this is the very *hottest* season of the year; and, as it happened, this was, last summer, *the very driest* also. The weather had been hot and dry from the *tenth of August;* and so it continued to the *12th of September*. Any gentleman who has kept a journal of last year, upon Long Island, will know this to be correct. Who would have thought to see these plants thrive ? Who would have thought to see them *live?* The next day after being planted, their leaves crumbled between our fingers like the old leaves of trees. In two days there was no more appearance of a crop upon the ground than there was of a crop on the

turnpike road. But, on the 2d of September, as I have it in my memorandum book, the plants *began to show life;* and, before the rain came, on the 12th, the piece began to have an air of verdure, and, indeed, to grow and to promise a good crop.

75. I will speak of the *bulk* of this crop by and by; but, I must here mention another transplantation that I made in the latter end of *July.* A plot of ground, occupied by one of my earliest sowings, had the turnips standing on it in rows at eighteen inches asunder, and at a foot asunder in the rows. Towards the middle of July I found, that one half of the rows must be taken away, or that the whole would be of little value. Having pulled up the plants, I intended to *transplant* them (as they say of bishops) from the garden to the field; but, I had no ground ready. However, I did not like to throw away these plants, which had already bulbs as large as hen's eggs. They were carried into the cellar, where they lay in a heap, till (which would soon happen in such hot weather) they began to *ferment.* This made the most of their leaves turn white. Unwilling, still, to throw them away, I next laid them *on the grass* in front of the house, where they got the dews in the night, and they were covered with a mat during the day, except two days, when they were overlooked, or, rather, neglected. The heat was very great, and, at last, supposing these plants *dead,* I did not cover them any more. There they lay abandoned till the 24th of July, on which day I began planting *cabbages* in my field. I then thought, that I would *try* the hardiness of a *Ruta Baga Plant.* I took these same abandoned plants, without a morsel of *green* left about them; planted them in part of a row of the piece of cabbages; and they, *a hundred and six* in number, weighed when they were taken up in December, *nine hundred and one pounds.* One of these turnips weighed *twelve* pounds and a half.

76. But, it ought to be observed, that this was in ground which had been got up in my best manner; that it had some of the best of my manure; and that uncommon pains were taken by myself in the putting in of the plants. This experiment shows, what a hardy plant this is; but, I must caution the reader against a belief, that it is either desirable or prudent to put this quality to so severe a test. There is no necessity for it, in general; and, indeed, the rule is, that the shorter time the plants are out of the ground the better.

77. But, as to the business of transplanting, there is one very material observation to make. The ground ought to be as *fresh;* that is to say, as *recently moved* by the plough, as possible; and that for the reasons before stated. The way I go on is this: My land is put up into ridges, as described under the head of *manner of sowing*. This is done beforehand. Several days; or, it may be, a week or more. When we have our plants and hands all ready, the ploughman begins and *turns in* the ridges; that is to say, ploughs the ground back again, so that the top of the new ploughed ridge stands over the place where the channel, or gutter, or deep furrow, was, before he began. As soon as he has finished the first ridge, the planters plant it, while he is ploughing the second: and so on throughout the field. That this is not a very tedious process the reader needs only to be told, that, in 1816, I had *fifty-two acres* of Ruta Baga planted in this way; and I think I had more than *fifty thousand bushels*. A smart hand will plant half an acre a day, with a girl or boy to drop the plants for him. I had a man, who planted an acre a day, many a time. But, supposing, that a quarter of an acre is a day's work. What are *four days' work* when put in competition with the value of an acre of this invaluable root? And what farmer is there, who has common industry, who would grudge to bend

his *own* back eight or twelve days, for the sake of keeping all his stock through the spring months, when dry food is loathsome to them, and when grass is by nature denied?

78. Observing well what has been said about earth *perfectly fresh*, and never forgetting this, let us now talk about the *act* of planting; the mere mechanical operation of putting the plant into the ground. We have a *setting-stick*, which should be the top of a spade-handle cut off, about ten inches below the eye. It must be pointed smoothly; and, if it be shod with thin iron, that is to say, covered with an iron sheath, it will work more smoothly, and do its business the better. At any rate the point should be nicely smoothed, and so should the whole of the tool. The planting is performed like that of cabbage plants; but, as I have met with very few persons, out of the market gardens and gentlemen's gardens in England, who knew how to plant a cabbage plant, so I am led to suppose, that very few, comparatively speaking, know how to plant a turnip plant.

79. You constantly hear people say, that they *wait for a shower*, in order to put out their cabbage plants. Never was there an error more general or more complete in all its parts. Instead of rainy weather being the best time, it is the very worst time, for this business of transplantation, whether of cabbages, or of any thing else, from a lettuce plant to an apple tree. I have proved the fact in scores upon scores of instances. The first time that I had any experience of the matter was in the planting out of a plot of cabbages in my garden at Wilmington, in Delaware. I planted in dry weather, and, as I had always done, in such cases, I *watered* the plants heavily; but, being called away for some purpose, I left one row *unwatered*, and it happened, that it so continued without my observing it 'till the next day. The sun had so completely scorched

it by the next night, that, when I repeated my watering of the rest, I left it, as being unworthy of my care, intending to plant some other thing in the ground occupied by this *dead* row. But, in a few days, I saw, that it was not dead. It grew soon afterwards; and, in the end, the cabbages of my *dead* row were not only larger, but *earlier* in loaving, than any of the rest of the plot.

80. The reason is this: if plants are put into *wet* earth, the setting-stick squeezes the earth up against the tender fibres in a *mortar-like* state. The sun comes and bakes this mortar into a sort of glazed clod. The hole made by the stick is also a *smooth* sided hole, which *retains its form*, and presents, on every side, an impenetrable substance to the fibres. In short, such as the hole is made, such it, in a great measure remains, and the roots are cooped up in this sort of *well*, instead of having a free course left them to seek their food on every side. Besides this, the fibres get, from being wet when planted, into a small compass. They all cling about the tap root, and are stuck on to it by the wet dirt, in which state, if a hot sun follow, they are all baked together in a lump, and cannot stir. On the contrary, when put into ground *unwet*, the reverse of all this takes place; and, the *fresh* earth will, under *any sun*, supply moisture in quantity sufficient.

81. Yet, in July and August, both in England and America, how many thousands and thousands are *waiting for a shower* to put out their plants! And, then, when the long-wished-for shower comes, they must plant upon *stale* ground, for they have it dug ready, as it were for the purpose of keeping them company in waiting for the shower. Thus all the fermentation, which took place upon the digging, is gone; and, when the planting has once taken place, farewell to the spade! For, it appears to be a *privilege* of the Indian Corn to receive something

like good usage *after being planted.* It is very strange, that it should have been thus; for, what *reason* is there for other plants not enjoying a similar benefit; The reason is, that they will produce *something* without it; and the Indian Corn will positively produce *nothing;* for which the Indian Corn is very much to be commended. As an instance of this effect of deeply moving the earth between growing crops, I will mention, that, in the month of June, and on the 26th of that month, a very kind neighbour of mine, in whose garden I was, showed me a plot of *Green Savoy Cabbages*, which he had planted in some ground as rich as ground could be. He had planted them about three weeks before; and they appeared very fine indeed. In the seed bed, from which he had taken his plants, there remained about *a hundred;* but, as they had been left as of *no use*, they had drawn each other up, in company with the weeds, 'till they were about eighteen inches high, having only a starved leaf, or two, upon the top of each. I asked my neighbour to give me these plants, which he readily did; but begged me not to plant them, for, he assured me, that they would *come to nothing*. Indeed, they were a ragged lot; but, I had no plants of my own sowing more than two inches high. I, therefore, took these plants and dug some ground for them between some rows of scarlet-blossom beans, which mount upon poles. I cut a stick on purpose, and put the plants very deep in the ground. My beans came off in August, and then the ground was well dug between the rows of cabbages. In September, mine had far surpassed the prime plants of my neighbour. And, in the end, I believe, that ten of *my cabbages* would have weighed more than *a hundred* of his, leaving out the stems in both cases. But, his had remained uncultivated *after planting*. The ground, battered down by the successive heavy rains, had become hard as brick. All the stores of

food had been locked up, and lay in a dormant state. There had been no renewed fermentations, and no exhalations.

82. Having now said what, I would fain hope, will convince every reader of the folly of *waiting for a shower* in order to transplant plants of any sort, I will now speak of the mere *act* of planting more particularly than I have hitherto spoken.

83. The hole is made sufficiently deep; deeper than the length of the root does really require; but, the root should not be *bent* at the point, if it can be avoided. Then, while one hand holds the plant, with its root in the hole, the other hand applies the setting-stick to the earth on one side of the hole, the stick being held in such a way as to form a sharp triangle with the plant. Then pushing the stick down, so that *its point goes a little deeper than the point of the root*, and giving it a little *twist*, it presses the earth against the *point*, or *bottom* of the root. And thus all is safe, and the plant is sure to grow.

84. The general, and almost universal fault, is, that the planter, when he has put the root into the hole, draws the earth up against the *upper part* of the root, or stem, and, if he presses pretty well there, he thinks that the planting is well done. But, it is the *point* of the root, against which the earth ought to be pressed, for there the *fibres* are; and, if they do not *touch* the earth *closely*, the plant will not thrive. The *reasons* have been given in Paragraphs 51 and 52, in speaking of the *sowing of seeds*. It is the same in all cases of *transplanting* or *planting*. Trees for instance, will be sure to grow, if you *sift* the earth, or pulverize it very finely, and place it carefully and closely about the roots. When we plant a tree, we see all *covered* by tumbling in the earth; and, it appears whimsical to suppose, that the earth does *not touch* all the roots. But, the fact is, that, unless great pains be taken,

there will be many cavities in the hole where the tree is planted ; and, in whatever places the earth does not closely touch the root, the root will *mould*, become cankered, and will lead to the producing of a poor tree.

85. When I began transplanting in fields in England, I had infinite difficulty in making my planters attend to the directions, which I have here given. "*The point of the stick to the point of the root*," was my constant cry. As I could not be much with my work-people, I used, in order to try whether they had planted properly, to go after them, and now-and-then take the tip of a leaf between my finger and thumb. If the plant resisted the pull, so as for the bit of leaf to come away, I was sure, that the plant was well fixed ; but, if the pull brought up the plant out of the ground ; then I was sure, that the planting was not well done. After the first field or two, I had no trouble. My work was as well done, as if the whole had been done by myself. My planting was done chiefly by *young women*, each of whom would plant half an acre a day, and their pay was *ten pence sterling* a day. What a shame, then, for any *man* to shrink at the *trouble* and *labour* of such a matter! Nor, let it be imagined, that these young women were poor, miserable, ragged, squalid creatures. They were just the contrary. On a Sunday they appeared in their *white* dresses, and with silk umbrellas over their heads. Their constant labour afforded the means of dressing well, their early rising and exercise gave them health, their habitual cleanliness and neatness, for which the women of the South of England are so justly famed, served to aid in the completing of their appearance, which was that of fine rosy-cheeked country girls, fit to be *help-mates*, and not a burden, of their future husbands.

86. But, at any rate, what can be said for a *man* that thinks too much of such a piece of labour ?

The earth is extremely grateful; but it must and will have something to be grateful for. As far as my little experience has enabled me to speak, I find no want of *willingness to learn* in any of the American workmen. Ours, in England, are apt to be very *obstinate*, especially if getting a little old. They do not like to be *taught* any thing. They say, and they think, that what their fathers did was best. To tell them, that it is *your* affair, and not *theirs* is nothing. To tell them, that the loss, if any, will fall upon *you* and not upon *them*, has very little weight. They argue, that, they being the real *doers*, ought to be the best judges of the *mode of doing*. And, indeed, in *most cases*, they are, and go about their work with wonderful skill and judgment. But, then, it is difficult to induce them cordially to do any thing *new*; or any old thing in a *new way*; and the abler they are as workmen, the more untractable they are, and the more difficult to be persuaded, that any one knows any thing, relating to farming affairs, better than they do. It was this difficulty that made me resort to the employment of young women in the most important part of my farming, the providing of immense quantities of cattle-food. But, I do not find this difficulty here, where no workmen are obstinate, and where, too, all one's neighbours *rejoice at one's success*, which is by no means the case amongst the farmers in England.

87. Having now given instructions relative to the business of *transplanting* of the *Ruta Baga*, let us see, whether it be not preferable to either the *ridge-sowing* method, or to the *broad-cast* method.

88. In the first place, when the seed is sown on the ground where the plants are to come to perfection, the ground, as we have seen in Paragraph 40 and Paragraph 47, must be prepared *early in June*, at the latest; but, in the transplanting method, this work may be put off, if need be 'till

early in August, as we have seen in Paragraphs 74 and 75. However, the best time for transplanting is about the 26th of July, and this gives a *month* for preparation of land, more than is allowed in the sowing methods. This, of itself, is a great matter; but, there are others of far greater importance.

89. This transplanted crop may follow *another crop on the same land.* Early cabbages will loave and be away; early peas will be ripe and off; nay, even wheat, and all grain, except buckwheat, may be succeeded by Ruta Baga transplanted. I had crops to succeed *Potatoes*, *Kidney-Beans*, *White Peas*, *Onions*, and even *Indian Corn*, gathered to eat green; and, the reader will please to bear in mind, that I did not sow, or plant, any of my *first* crops, just mentioned, 'till the *month of June*. What might a man do, then, who is in a state to begin with his first crops as soon as he pleases! Who has his land all in order, and his manure ready to be applied!

90. Another great advantage of the transplanting method is, that it saves almost the whole of the *after culture*. There is no *hoeing;* no *thinning* of the plants; and not more than one ploughing between the ridges. This is a great consideration, and should always be thought of, when we are talking of the *trouble* of transplanting. The turnips which I have mentioned in Paragraphs 72 and 73 had *no after culture* of any sort; for they soon spread the ground over with their leaves; and, indeed, after July very few weeds made their appearance. The season for their coming up is passed; and, as every farmer well knows, if there be no weeds up at the end of July, very few will come that summer.

91. Another advantage of the transplanting method is, that you are *sure* that you have your right number of plants, and those regularly placed. For, in spite of all you can do in sowing, there

will be deficiencies and irregularities. The seed may not come up, in some places. The plants may, in some places, be destroyed in their infant state. They may, now and then, be cut off with the hoe. The best plants may sometimes be cut up and the inferior plants left to grow. And, in the broad-cast method, the irregularity and uncertainty must be obvious to every one. None of these injurious consequences can arise in the transplanting method. Here, when the work is once well done, the crop is certain, and all cares are at an end.

92. In taking my leave of this part of my treatise, I must observe, that it is useless, and, indeed, unjust, for any man to expect success, unless he *attend* to the thing *himself*, at least 'till he has made the matter perfectly familiar to his work-people. To neglect *any part* of the business is, in fact, to neglect the whole; just as much as neglecting to put up one of the sides of a building, is to neglect the whole building. Were it a matter of trifling moment, personal attention might be dispensed with; but, as I shall, I think, clearly show, this is a matter of very great moment to every farmer. The object is, not merely to get roots, but to get them of a *large size;* for, as I shall show, there is an amazing difference in this. And, large roots are not to be gotten without *care*, which, by the bye, *costs nothing*. Besides, the care bestowed in obtaining this crop, removes all the million of cares and vexations of the winter and spring months, when bleatings everlasting din the farmer almost out of his senses, and make him ready to knock the brains out of the clamorous flock, when he ought to feel pleasure in the filling of their bellies.

93. Having now done with the different modes of *cropping* the ground with Ruta Baga, I will, as I proposed in Paragraph 49, speak about the

preparation of the land generally; and in doing this, I shall suppose the land to have borne a good crop of wheat the preceding year, and, of course, to be in *good heart*, as we call it in England.

94. I would plough this ground in the fall into ridges four feet asunder. The ploughing should be very deep, and the ridges well laid up. In this situation it would, by the successive frosts and thaws be shaken and broken fine as powder by March or April. In April, it should be turned back; always ploughing *deep*. A crop of weeds would be well set upon it by the first of June, when they should be smothered by another turning back. Then, about the *third week* in June, I would carry in my manure, and fling it along in the trenches or furrows. After this I would follow the turning back for the sowing, as is directed in Paragraph 50. Now, here are *four ploughings*. And what is the *cost* of these ploughings? My man, a black man, a native of this island, ploughs with his pair of oxen and no driver *an acre and a half a day*, and his oxen keep their flesh extremely well upon the *refuse* of the Ruta Baga which I send to market. What is the *cost* then? And, what a fine state the ground is thus brought into! A very different thing indeed is it to plough *hard* ground from what it is to plough ground in this fine, broken state. Besides, every previous ploughing, especially *deep* ploughing, is equal to a seventh part of an ordinary coat of manure.

95. In the broad-cast method I would give the same number of previous ploughings, and at the same seasons of the year. I would spread the manure over the ground just before I ploughed it for sowing. Then, when I ploughed for the sowing, I would, if I had only one pair of oxen, plough about half an acre, harrow the ground, sow it *immediately*, and roll it with a *light* roller, which a little horse might draw, in order to *press*

the earth about the seeds and *cover* them too.—There need be *no harrowing after sowing*. We never do it in England. The roller does all very completely, and the sowing upon the *fresh earth* will, under any sun, furnish the moisture sufficient. I once sowed, on ridges, with a BENNET's drill, and neither harrowed nor rolled, nor used any means at all of covering the seed; and yet I had plenty of plants and a very fine crop of turnips. I sowed a piece of white turnips, broad cast, at Hyde Park, last summer, on the eleventh of August, which did very well, though neither harrowed nor rolled after being sown. But, in both these cases, there came rain directly after the sowing, which battered down the seeds; and which rain, indeed, it was, which prevented the rolling; for that cannot take place when the ground is *wet;* because, then, the earth will adhere to the roller, which will go on growing in size like a rolling snow-ball. To harrow after the sowing is sure to do mischief. We always bury seeds *too deep;* and, in the operation of harrowing, more than half the seeds of turnips must be destroyed, or rendered useless. If a seed lies beyond the proper depth, it will either remain in a quiescent state, until some movement of the earth bring it up to the distance from the surface, which will make it vegetate, or, it will vegetate, and come up *later* than the rest of the plants. It will be *feebler* also; and it will never be equal to a plant, which has come from a seed near the surface.

96. Before I proceed further, it may not be amiss to say something more respecting the *burying* of seed, though it may here be rather out of place. Seeds buried below their proper depth, do not *come up;* but, many of them are near enough to the surface, sometimes, to *vegetate*, without coming up; and then they die. This is the case, in many instances, with more than one half of the seed that

is sown. But, if seeds be buried so deep, that they *do not even vegetate;* then they do not die; and this is one cause, though not the only cause, of our wondering to see *weeds* come up, where we are sure, that no seeds have fallen for many years. At every digging, or every ploughing, more or less of the seeds, that have formerly been buried, come up near the surface; and then they vegetate. I have seen many instances in proof of this fact; but, the particular instance, on which I found the positiveness of my assertion was one of *Parsnip* seed. It is a very delicate seed. It will, if beat out, keep only *one year*. I had a row of fine seed parsnips in my garden, many of the seeds of which fell in the gathering. The ground was dug in the fall, and, when I saw it full of Parsnips in the spring, I only regarded this as a proof, that Parsnips *might* be sown in the fall, though I have since proved, that that is a very bad practice. The ground was dug again, and again, for several successive years; and there was *always a crop of Parsnips*, without a grain of seed ever having been sown on it. But, lest any one should take it into his head, that this is a most delightful way of saving the trouble of sowing, I ought to state, that the parsnips coming thus at random, gave me a great deal more labour, than the same crop would have given me in the regular way of sowing. Besides, the fall is not the time to sow, as my *big* and white Parsnips, now selling in New-York market, may clearly show; seeing that *they* were sown in *June!* And yet, people are flocking to the *Western Countries* in search of *rich land*, while thousands of acres of such land as I occupy are lying waste in Long Island, within three hours' drive of the all-consuming and incessantly increasing city of New-York!

97. I have now spoken of the preparation of the land for the reception of *seeds*. As to the preparation in the case of *transplantation*, it might be just

the same as for the sowing on ridges. But, there might, in this case, be one more *previous* ploughing, always taking care to plough in *dry weather*, which is an observation I ought to have made before.

98. But, why should not the plants, in this case, *succeed some other good crop*, as mentioned before? I *sowed* some early peas (brought from England) on the 2d of June. I *harvested* them, quite ripe and hard, on the 31st of July; and I had very fine Ruta Baga, some weighing six pounds each, after the peas. How little is known of the powers of this soil and climate! My Potatoes were of the *kidney sort*, which, as every one knows, is not an *early* sort. They were planted on the 2d of June; and they were succeeded by a most abundant crop of Ruta Baga. And, the manure for the peas and potatoes served for the Ruta Baga also. In surveying my crops and feeling grateful to the kind earth and the glorious sun that produce these, to me, most delightful objects, how often have I turned, with an aching heart, towards the ill-treated Englishmen, shut up in dungeons by remorseless tyrants, while not a word had been uttered in their defence by, and while they were receiving not one cheering visit or comforting word from, SIR FRANCIS BURDETT, who had been the great immediate cause of their incarceration!

99. As to the quantity and sort of *manure* to be used in general, it may be the same as for a sowing of Rye, or of Wheat. I should prefer *ashes;* but, my large crops in England were on yard-dung, first thrown into a heap, and afterwards *turned* once or twice, in the usual manner as practised in England. At Hyde Park I had nothing but *rakings up* about the yard, barn, &c. as described before. What I should do, and what I shall do this year, is, to *make ashes* out of *dirt*, or *earth*, of any sort, not very stony. Nothing is so easy as this, especially in this fine climate. I see people go with their wagons

five miles for *Soper's ashes ;* that is to say, *spent* ashes, which they purchase at the landing place (for they come to the island in vessels) at the rate of about five dollars for forty bushels. Add the expense of land-carriage, and the forty bushels do not cost less than *ten dollars.* I am of opinion, that, by the burning of *earth*, as much manure may be got upon the land for *half a dollar.* I made an experiment last summer, which convinces me, that, if the spent ashes be received as *a gift* at *three miles* distance of land-carriage, they are not a gift worth accepting of. But, this experiment was upon a small scale ; and, therefore, I will not now speak positively on the subject.

100. I am now preparing to make a *perfect* trial of these ashes. I have just ploughed up a piece of ground, in which, a few years ago, Indian Corn was planted, and produced, as I am assured, only *stalks;* and those not more than *two feet high.* The ground has, every year since, borne a crop of weeds, rough grass, and briers, or brambles. The piece is about *ten acres.* I intend to have Indian Corn in it ; and, my manure shall be *made* on the spot, and consist of nothing but *burnt earth.* If I have a decent crop of Indian Corn on this land, so manured, it will, I think, puzzle my good neighbours to give a good reason for their *going five miles for spent ashes.*

101. Whether I succeed, or not, I will give an account of my experiment. This I know, that I, in the year 1815, burnt ashes, in one heap, to the amount of about *two hundred* English cart-loads, each load holding about forty bushels. I should not suppose, that the burning cost me more than *five dollars ;* and there they were upon the spot, in the very field, where they were used. As to their effect, I used them for transplanted Ruta Baga and Mangle Wurzle, and they produced full as great an effect as the yard-dung used in the same land. This

process of burning earth into ashes, *without suffering the smoke to escape*, during any part of the process, is a discovery of *Irish* origin. It was pointed out to me by Mr. WILLIAM GAUNTLETT of Winchester, late a commissary with the army in Spain. To this gentleman I also owe, England owes, and I hope America will owe, the *best sort of hogs*, that, I believe, are in the world. I was wholly unacquainted with Mr. GAUNTLETT, 'till the summer of 1815, when happening to pass by my farm, he saw my hogs, cows, &c. and, when he came to my house he called, and told me, that he had observed, that I wanted only a *good sort of hogs* to make my stock complete. I thought, that I already had the finest in England ; and I certainly had a very fine breed, the father of which, with legs not more than about six inches long, weighed, when he was killed, *twenty-seven score*, according to our Hampshire mode of stating hog meat weight ; or, *five hundred and forty pounds*. This breed has been fashioned by Mr. WOODS of Woodmancot in Sussex, who has been, I believe, more than twenty years about it. I thought it perfection itself ; but, I was obliged to confess, that Mr. GAUNTLETT's surpassed it.

102. Of the *earth burning* I will give an account in my next PART of this work. Nothing is easier of performance ; and the materials are every where to be found.

103. I think, that I have now pretty clearly given an account of the modes of sowing and planting and cultivating the Ruta Baga, and of the preparation of the land. It remains for me to speak of the *time and manner of harvesting*, the *quantity of the crop*, and of the *uses* of, and the *mode of applying* the crop.

Time and manner of harvesting.

104. This must depend, in some measure, upon the *age* of the turnips; for, some will have their full growth earlier than others; that is to say, those which are sown first, or transplanted first, will be *ripe* before those which are sown, or transplanted latest. I have made ample experiments as to this matter; and I will, as in former cases, first relate *what I did;* and then give my opinion as to what *ought* to be done.

105. This was a concern in which I could have no knowledge last fall, never having seen any turnips harvested in America, and knowing, that, as to American *frosts*, English experience was only likely to mislead; for, in England, we leave the roots standing in the ground all the winter, where we feed them off with sheep, which scoop them out to the very bottom; or we pull them as we want them, and bring them in to give to fatting oxen, to cows, or to hogs. I had a great opinion of the *hardiness* of the Ruta Baga, and was resolved to *try* it here, and I did try it upon too large a scale.

106. I began with the piece, the first mentioned in Paragraph 46. A part of them were taken up on the *13th of December*, after we had had some pretty hard frosts. The manner of doing the work was this. We took up the turnips merely by pulling them. The *greens* had been cut off and given to cattle before. It required a *spade*, however, just to loosen them along the ridge, into which their tap-roots had descended very deeply. We dug holes, at convenient distances, of a square form, and about a foot deep. We put into each hole about fifty bushels of turnips, piling them up above the level of the surface of the land, in a sort of pyramidical form. When the heap was made, we scattered over it about a truss of Rye-Straw, and

threw earth over the whole to a thickness of about a foot, taking care to point the covering at top, in order to keep out wet.

107. Thus was a small part of the piece put up. The 14th of December was *a Sunday*, a day that I can find no Gospel precept for devoting to the throwing away of the fruit of one's labours, and a day which I never will so devote again. However, I ought to have been *earlier*. On the Monday it *rained*. On the Monday night came a sharp North-Wester with its usual companion, at this season, that is to say, a *sharp frost*. Resolved to finish this piece on that day, I borrowed hands from my neighbours, who are always ready to assist one another. We had about two acres and a half to do; and it was necessary to employ *one half* of the hands to go before the *pullers* and loosen the turnips with a spade in the frosty ground. About ten o'clock, I saw, that we should not finish, and there was every sign of a hard frost at night. In order, therefore, to expedite the work, I called in the aid of those efficient fellow labourers, a *pair of oxen*, which, with a good, strong plough, going up on *one side* of each row of turnips, took away the earth close to the bulbs, left them bare on one side, and thus made it extremely easy to pull them up. We wanted spades no longer; all our hands were employed taking up the turnips; and our job, instead of being half done that day, was completed by about *two o'clock*. Well and justly did MOSES order, that the ox should not be muzzled while he was treading out the corn; for, surely, no animals are so useful, so docile, so gentle as these, while they require at our hands so little care and labour in return!

108. Now, it will be observed, that the turnips here spoken of, were put up when the ground and the turnips *were frozen*. Yet they have kept perfectly sound and good; and I am preparing to

plant some of them for seed. I am now writing on the *10th of April.* I send off these turnips to market every week. The tops and tails and offal go to the pigs, to ewes and lambs, to a cow, and working oxen, which all feed together upon this offal flung out about the barn-yard, or on the grass ground in the orchard. Before they have done, they leave not a morsel. But, of *feeding* I shall speak by and by.

109. The other crop of turnips, I mean those which were transplanted, as mentioned in Paragraphs 51 and 52, and which, owing to their being planted so late in the summer, kept on *growing* most luxuriantly 'till the very hard frosts came.

110. We were now got on to the 17th of December; and, I had *cabbages* to put up. Saturday, Sunday and Monday, the 21st, 22nd and 23rd, we had *very* hard frost, as the reader, if he live on this Island, will well remember. There came a *thaw afterwards;* and the transplanted turnips were put up like the others; but, this hard frost had pierced them too deeply, especially as they were in so tender and luxuriant a state. Many of these we find rotted near the neck; and, upon the whole, they have suffered a loss of about *one half.* An acre, *left to take their chance in the field*, turned out, like most other games of hazard, a *total loss.* They were *all* rotted.

111. This loss arose wholly from my want of sufficient experience. I was anxious to neglect no necessary precaution; and I was fully impressed, as I always am, with the advantages of being *early.* But, early in December, I lost a week at New-York; and, though I worried my neighbours half to death to get at a knowledge of the time of the hard weather setting in, I could obtain no knowledge, on which I could rely, the several accounts being so different from each other. The general account was, that there would be no *very hard*

weather 'till after Christmas. I shall know better another time! MAJOR CARTWRIGHT says, in speaking of the tricks of the English Boroughmongers, at the "*glorious* Revolution," that they will never be able to play the *same* tricks again; for, that nations, like rational individuals, are not deceived *twice* in the same way.

112. Thus have I spoken of the *time and manner of harvesting* as they took place with me. And, surely, the expense is a mere trifle. Two oxen and four men would harvest two acres in any clear day in the latter end of November; and thus is this immense crop harvested and covered completely for about *two dollars* and a half an acre. It is astonishing, that this is never done in England! For, though it is generally said, that the Ruta Baga will stand *any* weather; I know by experience, that it will not stand any weather. The winter of the year, 1814; that is to say, the months of January and February, were very cold, and a great deal of snow fell; and, in a piece of twelve acres, I had, in the month of March, two thirds of the turnips *completely rotten;* and these were amongst the finest that I ever grew, many of them weighing twelve pounds each. Besides, when taken up in *dry weather*, before the freezings and thawings begin, the dirt all falls off; and the bulbs are clean and nice to be given to cattle or sheep in the stalls or yards. For, though we, in general feed off these roots *upon the land* with sheep, we cannot, in deep land, always do it. The land is too *wet;* and particularly for Ewes and Lambs, which are, in such cases, brought into a piece of pasture land, or into a fold-yard, where the turnips are flung down to them in a *dirty* state, just carted from the field. And, again, the land is very much injured, and the labour augmented, by carting when the ground is a sort of mud-heap, or rather, pool. All these inconveniences and injuries would be avoided by harvesting in a dry day

in November, if such a day should, by any accident, be found in England; but, why not do the work in October, and sow wheat, at once, in the land? More on this after cropping another time.

113. In Long Island, and throughout the United States, where the weather is so fine in the fall; where every day, from the middle of October to the end of November, (except a rainy day about once in 16 days) is as fair as the fairest May-day in England, and where such a thing as a *water-furrow* in a field was never heard of; in such a soil as this, and under such a climate as this, there never can arise any difficulty in the way of the harvesting of turnips in the proper time. I should certainly do it in *November;* for, as we have seen, a *little frost* does not affect the bulbs at all. I would put them in when perfectly *dry;* make my heaps of about fifty bushels; and, when the frost approached, I mean the *hard* frosts, I would cover with corn-stalks, or straw, or cedar boughs, as many of the heaps as I thought I should want in January and February; for, these coverings would so break the frost, as to enable me to open the heaps in those severe months. It is useless and inconvenient to take into barns, or out-houses, a very large quantity at a time. Besides, if left *uncovered*, the very hard frosts will do them harm. To be sure, this is easily prevented, in the barn, by throwing a little straw over the heap; but, being, by the means that I have pointed out, always kept ready in the field, to bring in a larger quantity than is used in a *week*, or thereabouts, would be wholly *unnecessary*, besides being troublesome from the great space, which would thus be occupied.

114. It is a great advantage in the cultivation of this crop, that the *sowing*, or transplanting time, comes *after* all the spring grain and the Indian Corn are safe in the ground, and *before* the harvest

of grain begins ; and then again, in the fall, the taking up of the roots comes after the grain and corn and buckwheat harvests, and even after the sowing of the winter grain. In short, it seems to me, that the cultivation of this crop, in this country, comes, as it were expressly, to fill up the unemployed spaces of the farmer's time ; but, if he prefer standing with his arms folded, during these spaces of time, and hearing his flock bleat themselves half to death in March and April, or have no flock, and scarcely any cattle or hogs, raise a few loads of yard-dung, and travel five miles for ashes and buy them dear at the end of the five miles ; if he *prefer* these, then, certainly, I shall have written on this subject in vain.

Quantity of the Crop.

115. It is impossible for me to say, at present, what quantity of Ruta Baga *may* be grown on an acre of land in this island. My three acres of *ridged* Turnips, sown on the 26th of June were very unequal ; but, upon one of the acres, there were *six hundred and forty bushels ;* I mean *heaped bushels ;* that is to say, an English statute Bushel heaped as long as the commodity will lie on. The transplanted Turnips yielded about *four hundred* bushels to the acre : but, then, observe, they were put in a full month too late. This year, I shall make a fair trial.

116. I have given an account of my raising, upon five acres in one field, and twelve acres in another field, one thousand three hundred and twenty bushels to an acre, throughout the seventeen acres. I have no doubt of equalling that quantity on this Island, and that, too, upon some of its poorest and most exhausted land. They tell

me, indeed, that the last summer was a *remarkably* fine summer; so they said at Botley, when I had my first prodigious crop of Ruta Baga. This is the case in all the pursuits of life. The moment a man excels those, who ought to be able and willing to do as well as he; that moment, others set to work to discover causes for his success other than those proceeding *from himself*. But, as I used to tell my neighbours at Botley, "You "have had the *same* seasons that I have had. No-"thing is so *impartial* as weather." As long as this sort of observation, or inquiry, proceeds from a spirit of *emulation*, it may be treated with great indulgence; but, when it discovers a spirit of *envy*, it becomes detestable, and especially in affairs of agriculture, where the appeal is made to our common parent, and where no man's success can be injurious to his neighbour, while it *must* be a benefit to his country, or the country in which the success takes place. I must, however, say, and I say it with feelings of great pleasure, as well as from a sense of justice, that I have observed in the American farmers *no envy* of the kind alluded to; but, on the contrary, the greatest *satisfaction*, at my success; and not the least backwardness, but great forwardness, to applaud and admire my mode of cultivating these crops. Not so, in England, where the *farmers* (*generally* the most stupid as well as most slavish and most churlish part of the nation) envy all who excel them, while they are too obstinate to profit from the example of those whom they envy. I say *generally;* for there are many most honourable exceptions; and, it is amongst that class of men, that I have my dearest and most esteemed friends; men of knowledge, of experience, of integrity, and of public-spirit, equal to that of the best of Englishmen in the worst times of oppression. I would not exchange the friendship of one of these

men for that of all the Lords that ever were created, though there are some of them very able and upright men too.

117. Then, if I may be suffered to digress a little further here, there exists, in England, an institution which has caused a sort of *identity of agriculture with politics*. The Board of Agriculture, established by Pitt for the purpose of sending *spies* about the country, under the guise of agricultural surveyors, in order to learn the cast of men's politics as well as the taxable capacities of their farms and property; this Board gives no premium or praise to any but "*loyal* farmers," who are generally the greatest fools. I, for my part, have never had any communication with it. It was always an object of ridicule and contempt with me; but, I know this to be the *rule* of that body, which is, in fact, only a little twig of the vast tree of Corruption, which stunts and blights and blasts all that approaches its poisoned purlieu. This Board has for its Secretary, Mr. ARTHUR YOUNG, a man of great talents, *bribed* from his good principles, by this place of five hundred pounds a year. But, Mr. YOUNG, though a most able man, is not always to be trusted. He is a bold asserter; and very few of his statements proceed upon actual experiments. And, as to what this Board has *published*, at the public expense, under the name of *Communications*, I defy the world to match it as a mass of illiterate, unintelligible, and useless trash. The only paper, published by this Board, that I ever thought worth keeping, was an account of the produce from a *single cow*, communicated by Mr. CRAMP, the jail-keeper of the County of Sussex; which contained very interesting and wonderful facts, properly authenticated, and stated in a clear manner.

118. ARTHUR YOUNG is blind, and never attends the Board. Indeed, sorrowful to relate, he is be-

come a *religious fanatic*, and this in so desperate a degree as to leave no hope of any possible cure. In the pride of our health and strength, of mind as well as of body, we little dream of the chances and changes of old age. Who can read the "*Travels in France, Spain, and Italy*," and reflect on the present state of the admirable writer's mind, without feeling some diffidence as to what may happen to himself!

119. Lord Hardwicke, who is now the President of the Board, is a man, not exceeding my negro, either in experience or natural abilities. A parcel of court-sycophants are the Vice-Presidents. Their Committees and Correspondents are a set of Justices of the Peace, Nabobs become Country-Gentlemen, and Parsons of the worst description. And thus is this a mere political job; a channel for the squandering of some thousands a year of the people's money upon worthless men, who ought to be working in the fields, or mending "His Majesty's "High Ways."

120. Happily politics, in this country, have nothing to do with agriculture; and here, therefore, I think I have a chance to be fairly heard. I should, indeed, have been heard in England; but, I really could never bring myself to do any thing tending to improve the estates of the oppressors of my country; and the same consideration now restrains me from communicating information, on the subject of timber trees, which would be of immense benefit to England; and which information I shall reserve, 'till their tyranny shall be at an end. Castlereagh, in the fulness of his stupidity, proposed, that in order to find employment for "*the population*," as he insolently called *the people of England*, said, that he would set them to dig holes one day and fill them up the next. I could tell him what to *plant* in the holes so as to benefit the country in an immense degree; but, like the human body in

some complaints, the nation would now be really injured by the communication of what, if it were in a healthy state, would do it good, and add to its strength and to all its means of exertion.

121. To return from this digression, I am afraid of *no bad seasons*. The *drought*, which is the great enemy to be dreaded in this country, I am quite prepared for. Give me ground that I can plough ten or twelve inches deep, and give me Indian Corn spaces to plough in, and no sun can burn me up. I have mentioned Mr. CURWEN's experiments before; or, rather TULL's. For, he it is, who made all the discoveries of this kind. Let any man, just to try, leave half a rod of ground *undug* from the month of May to that of October; and another half rod let him *dig* and *break fine* every ten or fifteen days. Then, whenever there has been fifteen or twenty days of good scorching sun, let him go and dig a hole in each. If he does not find the hard ground *dry as dust*, and the other *moist;* then let him say, that I know nothing about these matters. So erroneous is the common notion, that ploughing *in dry weather lets in the drought!*

122. Of course, proceeding upon this fact, which I state as the result of numerous experiments, I should, if visited with long droughts, give one or two additional ploughings between the crops when growing. That is all; and, with this, in Long Island, I defy all droughts.

123. But, why need I insist upon this effect of ploughing in dry weather? Why need I insist on it in an Indian Corn country? Who has not seen fields of Indian Corn looking, to-day, yellow and sickly, and, in four days hence (the weather being dry all the while,) looking green and flourishing; and this wonderful effect produced merely by the plough? Why, then, should not the same effect always proceed from the same cause? The *deeper* you plough the greater the effect, however; for

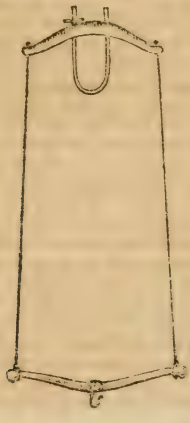
there is a greater body of earth to exhale from, and to receive back the tribute of the atmosphere. Mr. CURWEN tells us of a piece of cattle-cabbage. In a very dry time in July, they looked so *yellow* and *blue*, that he almost despaired of them. He sent in his ploughs; and a gentleman, who had seen them when the ploughs went in on the Monday, could scarcely believe his eyes when he saw them on the next Saturday, though it had continued dry all the week.

124. To perform these summer ploughings, in this Island, is really nothing. The earth is so light and in such fine order, and so easily displaced and replaced. I used one horse for the purpose last summer, and a very slight horse indeed. *An ox* is, however, better for this work; and this may be accomplished by the use of a *collar* and two traces, or by a single *yoke* and two traces. TULL recommends the latter; and I shall try it for Indian Corn as well as for Turnips.* Horses, if they are strong

* Since the above paragraph was written, I have made a *Single Ox-Yoke;* and, I find it answer excellently well. Now, my work is much shortened; for in forming ridges, two Oxen are *awkward.* They occupy a wide space, and one of them is obliged to walk upon the ploughed land, which, besides making the ridge uneven at the top, presses the ground, which is injurious. For ploughing between the rows of Turnips and of *Indian Corn* also, what a great convenience this will be! An ox goes *steadier* than a horse, and will plough *deeper* without fretting and tearing; and he wants neither *harness-maker* nor *groom.* The plan of my yoke I took from TULL. I showed it to my workman, who chopped off the limb of a tree, and made the yoke in an hour. It is a piece of wood, with two holes to receive two ropes, about three quarters of an inch in diameter. These traces are fastened in the yoke merely by a knot, which prevents the ends from passing through the holes, while the other ends are fastened to the two ends of a *Wiffle-tree,* as it is called in Long Island, of a *Wipple-tree* as it is called in Kent, and of a *Wippance* as it is called in Hampshire. I am but a poor draftsman; but, if the printer can find any thing to make the representation with, the following draft will clearly show what I have meant to describe in words. When the Corn (Indian) and Turnips get to a size, sufficient

enough, are not so *steady* as oxen, which are more patient also, and with which you may send the plough-share *down* without any of the fretting and unequal pulling, or jerking, that you have to encounter with horses. And, as to the *slow pace* of the ox, it is the old story of the tortoise and the hare. If I had known in England, of the use of oxen, what I have been taught upon Long Island, I might have saved myself some hundreds of pounds a year. I ought to have followed TULL in this as in all other parts of his manner of cultivating land. But, in our country, it is difficult to get a ploughman to look at an ox. In this Island the thing is done so completely and so easily, that it was, to me, quite wonderful to behold. To see one of these Long-Islanders going into the field, or orchard, at sun rise, with his yoke in his hand, call his oxen

to attract the *appetite* of the ox, you have only to put on a *muzzle*. This is what Mr. TULL did; for, though we ought not to muzzle the ox "as he *treadeth out the corn*," we may do it, even for his own sake, amongst other considerations, when he is assisting us to bring the crop to perfection.



by name to come and put their necks under the yoke, drive them before him to his plough, just hitch a hook on to the ring of the yoke, and then, without any thing except a single chain and the yoke, with no reins, no halters, no traces, no bridle, no driver, set on to plough, and plough a good acre and a half in the day ; to see this would make an English farmer stare ; and well it might, when he looked back to the ceremonious and expensive business of keeping and managing a plough-team in England.

125. These are the means, which I would, and which I shall, use to protect my crops against the effects of a *dry season*. So that, as every one has the same means at his command, no one need be afraid of drought. It is a *bright* plough-share that it always wanted much more than showers. With this culture there is no fear of a crop ; and though it amount to only five hundred bushels on an acre, what crop is *half* so valuable.

126. The *bulk of crop*, however, in the *broad-cast*, or random, method, may be materially affected by *drought ;* for, in that case, the plough cannot come to supply the place of showers. The ground there will be dry and keep dry in a dry time ; as in the case of the supposed half rod of undug ground in the garden. The weeds, too, will come and help, by their roots, to suck the moisture out of the ground. As to the *hand-hoeings*, they may keep down weeds to be sure, and they raise a trifling portion of exhalation ; but, it is trifling indeed. Dry weather, if of long continuation, makes the leaves become of a *bluish* colour ; and, when this is once the case, all the rain and all the fine weather in the world will never make the crop a good one ; because the plough cannot move amidst this scene of endless irregularity. This is one of the chief reasons why the ridge method is best.

Uses of and mode of applying, the crop.

127. It is harder to say, what uses this root may *not* be put, than what uses it *may* be put to, in the feeding of animals. They are eaten greedily by sheep, horn cattle, and hogs, in their raw state. *Boiled* or *steamed* (which is better) no *dog* that I ever saw, will refuse it. Poultry of all sorts will live upon it in its cooked state. Some dogs will even eat it raw; a fact that I first became acquainted with by perceiving my Shepherd's dog eating it in the field along with the sheep. I have two *Spaniels* that come into the barn and eat it raw; and yet they are both in fine condition. Some horses will nearly live upon it in the raw state; others are not so fond of it.

128. Let me give an account of what I am doing now (in the month of April) with my crop.

129. It is not pretended, that this root, *measure for measure*, is equal to *Indian Corn in the ear*. Therefore, as I can get Indian Corn in the ear for half a dollar a bushel, and, as I sell my Ruta Baga for half a dollar a bushel at New-York, I am very sparing of the use of the latter for animals. Indeed, I use none at home, except such as have been injured, as above-mentioned, by the delay in the harvesting. These damaged roots I apply in the following manner.

130. Twice a day I take about two bushels, and scatter them about upon the grass for fifteen Ewes with their lambs and a few wether sheep, and for seven stout store-pigs, which eat with them. Once a day I fling out a parcel of the refuse that have been cut from the roots sent to market, along with cabbage leaves, and stems, parsnip fibres, and the like. Here the working oxen, hogs, cow, sheep and fowls, all feed as they please. All these animals are in excellent condition. The cow has *no*

other food ; the working oxen a lock of hay twice a day ; the Ewes an ear of Indian Corn each ; the pigs nothing but the roots : the fowls and ducks and turkeys are never *fed* in any other way, though they know how to feed themselves whenever there is any thing good to be found above ground.

131. I am *weaning* some pigs, which, as every one knows, is an affair of *milk* and *meal.* I have neither. I give about three buckets of *boiled* Ruta Baga to *seven pigs* every day, not having any convenience for steaming ; and two *baits* of *Indian Corn in the ear.* And, with this diet, increasing the quantity with the growth of the pigs, I expect to turn them out of the stye fatter (if that be possible) than they entered it. Now, if this *be so*, every farmer will say, that this is what never was done before in America. We all know how important a thing it is to *wean* a pig *well.* Any body can wean them without *milk* and *meal ;* but, then the pigs are good for nothing. They remain three months afterwards and never grow an inch ; and they are, indeed, not worth having. To have milk, you must have *cows*, and cows are vast consumers ! To have cows, you must have *female labour*, which, in America, is a very precious commodity. You cannot have *meal* without sharing in kind pretty liberally with the miller, besides bestowing labour, however busy you may be, to carry the corn to mill and bring the meal back. I am, however, speaking here of the pigs from my English breed ; though I am far from supposing that the common pigs might not be weaned in the same way.

132. *Sows with young pigs* I feed thus : boiled Ruta Baga twice a day. About three ears of Indian Corn a piece twice a day. As much offal Ruta Baga *raw* as they will eat. Amongst this boiled Ruta Baga, the pot-liquor of the house goes, of course ; but, then, the dogs, I dare say, take care, that the best shall fall to their lot : and as there are

four of them pretty fat, their share cannot be very small. Every one knows, what good food, how much *meal* and *milk* are necessary to sows which have pigs. I have no milk, for my cow has not yet calved. And, then, what a *chance* concern this is; for, the sows may perversely have pigs at the time when the cows *do not please to give milk;* or, rather, when they, poor things, without any fault of theirs, are permitted to *go dry*, which never need be, and never ought to be the case. I had a cow once that made more than two pounds of butter during the week, and had a calf on the Saturday night. Cows always ought to be milked to the very day of their calving, and during the whole of the time of their suckling their calves. But, "sufficient unto the day is the evil thereof." Let us leave this matter 'till another time. Having, however, accidentally mentioned *cows*, I will just observe, that, in the little publication of Mr. CRAMP, mentioned above, as having been printed by the Board of Agriculture, it was stated, and the proof given, that his *single cow* gave him, *clear profit*, for several successive years, more than *fifty pounds sterling a year*, or upwards of *two hundred and twenty dollars*. This was *clear profit;* reckoning the food and labour, and taking credit for the calf, the butter, and for the skim milk at *a penny a quart* only. Mr. CRAMP's was a *Sussex* cow. Mine were of the *Alderny* breed. Little, small boned things; but, two of my cows, fed upon *three quarters of an acre of grass ground*, in the middle of my shrubbery, and fastened to pins in the ground, which were shifted twice a day, made *three hundred pounds of butter* from the 28th of March to the 27th of June. This is a finer country for cattle than England; and yet, what do I see!

133. This difficulty about feeding sows with young pigs and weaning pigs, is one of the greatest of hinderances to improvement; for, after all, what

animal produces flesh meat like the hog? Applicable to all uses, either fresh or salted, is the meat. Good in all its various shapes. The animal killable at all ages. Quickly fatted. Good if half fat. Capable of supporting an immense burden of fat. Demanding but little space for its accommodation; and yet, if grain and corn and milk are to be their principal food, during their lives, they cannot multiply very fast; because many upon a farm cannot be kept to much profit. But, if, by providing a sufficiency of Ruta Baga, a hundred pigs could be raised upon a farm in a year, and carried on 'till fatting time, they would be worth, when ready to go into the fatting style, fifteen dollars each. This would be something worth attending to; and, the farm *must* become rich from the manure. The Ruta Baga, taken out of the heaps early in April, will keep well and sound all the summer; and, with a run in an orchard, or in any grassy place, it will keep a good sort of hog always in a very thriving and even *fleshy* state.

134. This root, being called a *turnip*, is regarded as a *turnip*, as a common turnip, than which nothing can be much less resembling it. The common turnip is a very poor thing. The poorest of all roots of the bulb kind, cultivated in the fields; and, the Ruta Baga, all taken together, is, perhaps, the very best. It loses none of its good qualities by being long kept, though dry all the while. A neighbour of mine in Hampshire, having saved a large piece of Ruta Baga for *Seed*, and having, after harvesting the seed, accidentally thrown some of the roots into his yard, saw his hogs eat these old roots, which had borne the seed. He gave them some more, and saw that they eat them greedily. He, therefore, went and bought a whole drove, in number about forty, of lean pigs of a good large size, brought them into his yard, carted in the roots of his seed Ruta Baga; and, without having

given the pigs a handful of any other sort of food, sold out his pigs as *fat porkers*. And, indeed, it is a fact well known, that sheep and cattle as well as hogs will thrive upon this root after it has borne seed, which is what, I believe, can be said of no other root or plant.

135. When we feed off our Ruta Baga in the fields, in England, by sheep, there are small parts left by the sheep ; the *shells* which they have left after scooping out the pulp of the bulb ; the tap root ; and other little bits. These are pecked out of the ground ; and when washed by the rain, other sheep follow and live upon these. Or, in default of other sheep, hogs or cattle are turned in in dry weather, and they leave not a morsel.

136. Nor are the *greens* to be forgotten. In England, they are generally eaten by the sheep, when these are turned in upon them. When the roots are taken up for uses at the home-stead, the greens are given to store pigs and lean cattle. I cut mine off, while the roots were in the ground, and gave them to fatting cattle upon grass land alternately with Indian Corn in the ear ; and, in this way, they are easily and most profitably applied, and they come, too, just after the grass is gone from the pastures. An acre produces about four good wagon loads of greens ; and they are taken off fresh and fresh as they are wanted, and, at the same time, the roots are thus made ready for going, at once, into the heaps. Pigs, sheep, cattle ; all like the greens as well as they do the roots. Try any of them with the greens of *White* Turnips ; and, if they touch them, they will have changed their natures, or at least, their tastes.

137. The Mangle Wurzle, the Cabbage, the Carrot, and the Parsnip, are all useful ; and, the *latter*, that is to say, the *Parsnip*, very valuable indeed ; but, the *main* cattle-crop is the Ruta Baga. Even the *White* Turnip, if well cultivated,

may be of great use; and, as it admits of being *sown later*, it may often be very desirable to raise it. But, reserving myself to speak fully, in a future part of my work, of my experiments as to these crops, I shall now make a short inquiry as to the value of a crop of Ruta Baga, compared with the value of any other crop. I will just observe, in this place, however, that I have grown *finer* carrots, parsnips and Mangle Wurzle, and even finer cabbages, than I ever grew upon the richest land in Hampshire, though not a seed of any of them was put into the ground 'till the *month of June*.

138. A good mode, it appears to me, of making my proposed comparative estimate, will be to say, *how I would proceed*, supposing me to have a farm of my own in this Island, of only one hundred acres. If there were not twelve acres of orchard, near the house, I would throw as much grass land to the orchard as would make up the twelve acres, which I would fence in in an effectual manner, against small pigs as well as large oxen.

139. Having done this, I would take care to have fifteen acres of *good* Indian Corn, well planted, well suckered and well tilled in all respects. Good, deep ploughing between the plants would give me forty bushels of shelled corn to an acre; and a ton to the acre of fodder for my four working oxen and three cows and my sheep and hogs, of which I shall speak presently.

140. I would have *twelve* acres of Ruta Baga, *three* acres of Early Cabbages, an acre of Mangle Wurzle, an acre of Carrots and Parsnips, and as many White Turnips as would grow between my rows of Indian Corn after my last ploughing of that crop.

141. With these crops, which would occupy thirty-two acres of ground, I should not fear being able to keep a good house in all sorts of

meat, together with butter and milk, and to send to Market nine quarters of beef and three hides, a hundred early fat lambs, a hundred hogs, weighing twelve score, as we call it in Hampshire, or two hundred and forty pounds each, and a hundred fat ewes. These, all together, would amount to about three thousand dollars, exclusive of the cost of a hundred Ewes and of three Oxen; and, I should hope, that the produce of my trees in the orchard and of the other fifty-six acres of my farm would pay the rent and the labour; for, as to *taxes*, the amount is not worth naming, especially after the sublime spectacle of that sort, which the world beholds in England.

142. I am, you will perceive, not making any account of the price of Ruta Baga, Cabbages, Carrots, Parsnips, and White Turnips at *New-York*, or any other market. I *now*, indeed, sell carrots and parsnips at three quarters of a dollar the *hundred* by tale; cabbages (of last fall) at about three dollars a hundred, and White Turnips at a quarter of a dollar a bushel. When this can be done, and the distance is within twenty or thirty miles on the *best road in the world*, it will, of course, be done; but, my calculations are built upon a supposed consumption of the whole upon the farm by animals of one sort or another.

143. My feeding would be nearly as follows. I will begin with February; for, until then the Ruta Baga does not come to its sweetest taste. It is like an apple, that must have time to ripen; but, then, it retains its goodness much longer. I have proved, and especially in the feeding of hogs, that the Ruta Baga is never so good, 'till it arrives at a mature state. In February, and about the first of that month, I should begin bringing in my Ruta Baga, in the manner before described. My three oxen, which would have been brought forward by other food to be spoken of by and by, would be *tied* up in

a stall looking into one of those fine commodious barns'-floors which we have upon this island. Their stall should be *warm*, and they should be kept well littered, and cleaned out frequently. The Ruta Baga, just chopped into large pieces with a spade or shovel, and tossed into the manger to the oxen at the rate of about two bushels a day to each ox, would make them completely fat, without the aid of corn, hay, or any other thing. I should, probably, kill one ox at Christmas, and, in that case, he must have had a longer time than the others upon other food. If I killed one of the two remaining oxen in the middle of March and the other on the first of May, they would consume 266 bushels of Ruta Baga.

144. My hundred Ewes would begin upon Ruta Baga at the same time, and, as my grass ground would be only twelve acres until after hay-time, I shall suppose them to be fed on this root till July, and they will always eat it and thrive upon it. They will eat about 8 pounds each, a day ; so that, for 150 days it would require a hundred and twenty thousand pounds weight, or two thousand four hundred bushels.

145. Fourteen breeding sows to be kept all the year round, would bring a hundred pigs in the Spring, and they and their pigs would, during the same 150 days, consume much about the same quantity ; for though the pigs would be small during these 150 days, yet they eat a great deal more than a sheep in proportion to their size, or, rather bulk. However, as they would eat very little during 60 days of their age, I have rather over-rated their consumption.

146. Three cows and four working oxen would, during the 150 days consume about one thousand bushels, which, indeed, would be more than sufficient, because, during a great part of the time, they would more than half live upon Corn stalks ;

and, indeed, this, to a certain extent would be the case with the sheep. However, as I mean that every thing should be of a good size, and *live well*, I make ample provision.

147. I should want, then, to raise *five hundred* bushels of Ruta Baga upon each of my twelve acres; and, why should I not do it, seeing that I have this year raised *six hundred and forty* bushels upon an acre, under circumstances such as I have stated them. I lay it down, therefore, that, with a culture as good as that of Indian Corn, any man may, on this Island (where Corn will grow) have 500 bushels to the acre.

148. I am now come to the first of July. My Oxen are fatted and disposed of. My Lambs are gone to market, the last of them, a month ago. My pigs are weaned and of a good size. And now my Ruta Baga is gone. But, my Ewes, kept well through the winter, will soon be fat upon the 12 acres of orchard and the hay-ground, aided by my three acres of early cabbages, which are now fit to begin cutting, or, rather, pulling up. The weight of this crop may be made very great indeed. Ten thousand plants will stand upon an acre, in *four feet ridges*, and every plant ought to weigh *three pounds* at least. I have shown before how advantageously Ruta Baga *transplanted* would follow these cabbages, all through the months of July, and August. But, what a crop of *Buckwheat* would follow such of the cabbages as came off in *July!* My Cabbages, together with my hay fields and grain fields after Harvest, and about 40 or 50 wagon loads of Ruta Baga *greens*, would carry me along well 'till December (the cabbages being planted at different times); for my Ewes would be sold fat in July, and my pigs would be only increasing in demand for food; and the new hundred Ewes need not, and ought not, to be kept so well as if they were fatting, or had lambs by their side.

149. From the first of December to the first of February, Mangle Wurzle and White Turnips would keep the sheep and cattle and breeding sows plentifully; for the latter will live well upon Mangle Wurzle; and my hundred hogs, intended for fatting would be much *more* than *half* fat upon the carrots and parsnips. I should, however, more probably, keep my parsnips 'till spring, and mix the feeding with carrots with the feeding with corn, for the first month, or fifteen days, with regard to the fatting hogs. None of these hogs would require more than three bushels of corn each to finish them completely. My other three hundred bushels would be for sows giving suck; for the Ewes, now and then in wet weather; and for other occasional purposes.

150. Thus all my *hay* and *oats* and *wheat* and *rye* might be sold, leaving me the straw for litter. These, surely, would pay the rent and the labour; and, if I am told, that I have taken no account of the mutton and lamb and pork that my house would demand, neither have I taken any account of *a hundred summer pigs*, which the fourteen sows would have, and which would hardly fail to bring two hundred dollars. Poultry demand some *food;* but, three parts of their raising consists of *care;* and, if I had nobody in my house to bestow this care, I should, of course, have the less number of mouths to feed.

151. But, my *horses*. Will not they swallow my *hay* and my *oats?* No: for I want no horses. But, am I never to *take a ride*, then? Ay, but, if I do, I have no right to lay the expense of it to the account of the *farm*. I am speaking of how a man may live by and upon *a farm*. If a merchant spend a thousand a year, and gain a thousand, does he say, that his traffick has gained him nothing? When men *lose money by farming*, as they call it, they forget, that it is not the *farming*, but other expenses that take away their money. It is, in fact, they that

rob the farm, and not the farm them. Horses may be kept for the purpose of going to church, or to meeting, or to pay visits. In many cases this may be not only convenient, but necessary, to a family; but, upon this island, I am very sure, that it is neither convenient nor necessary to *a farm*. "What!" the ladies will say, "would you have us "to be shut up at home all our lives; or be drag-"ged about by oxen." By no means; not!! I should be very sorry to be thought the author of any such advice. I have no sort of objection to the keeping of horses upon a farm; but, I do insist upon it, that all the food and manual labour required by such horses, ought to be considered as so much taken from the clear profits of the farm.

152. I have made sheep, and particularly *lambs*, a part of my supposed stock; but, I do not know, that I should keep any beyond what might be useful for my house. *Hogs* are the most profitable stock, if you have a large quantity of the food that they will *thrive* on. They are *foul* feeders; but they will eat nothing that is *poor* in its nature; that is to say, they will not *thrive* on it. They are the most able *tasters* in all the creation; and, that which they like best, you may be quite sure has the greatest proportion of nutritious matter in it, from a White Turnip to a piece of beef. They will prefer meat to corn, and cooked meat to raw; they will leave parsnips for corn or grain; they will leave carrots for parsnips; they will leave Ruta Baga for carrots; they will leave cabbages for Ruta Baga; they will leave Mangle Wurzle for cabbages; they will leave potatoes (both being raw) for Mangle Wurzle. A *White* turnip they will not touch, unless they be on the point of starving. They are the best of *triers*. Whatever they prefer is sure to be the *richest* thing within their reach. The parsnip is, by many degrees, the richest root; but, the seed lies long in the

ground ; the sowing and after culture are works of great niceness. The crop is large with good cultivation ; but, as a *main* crop, I prefer the Ruta Baga, of which the crop is immense, and the harvesting and preserving and application of which are so easy.

153. The farm I suppose to be in *fair condition* to start with. The usual grass seeds sown, and so forth, and every farmer will see, that, under my system, it must soon become rich as any garden need to be, without my sending men and horses to the water side to fetch ashes, which have been brought from Boston, or Charleston, an average distance of seven hundred miles ! In short, my stock would give me, in one shape or another, manure to the amount in utility of more than a thousand tons weight a year of common yard manure. This would be ten tons to an acre *every year*. The farm would, in this way become more and more productive ; and, as to its being *too rich*, I see no danger of that ; for a broad-cast crop of wheat will, at any time, tame it pretty sufficiently.

154. Very much, in my opinion, do those mistake the matter, who strive to get a *great breadth* of land, with the idea, that, when they have *tired* one field, they can let it lie, and go to another. It is better to have one acre of good crop, than two of bad or indifferent. If the one acre can, by *double* the manure and *double* the labour in tillage, be made to produce as much as two other acres, the one acre is preferable, because it requires only half as much fencing, and little more than half as much harvesting, as two acres. There is many a ten acres of land near London, that produce more than any common farm of two hundred acres. My garden of *three quarters of an acre* produced more, in value, last summer, from June to December, than any *ten acres* of oat land upon Long Island, though I there saw as fine fields of oats as I ever saw in my life.—

A *heavy crop* upon *all* the ground that I put a plough into is what I should seek, rather than to have a great quantity of land.

155. The business of carting manure from a *distance* can, in very few, if any cases, answer a profitable purpose. If any man would give me even horse dung at the stable door, four miles from my land, I would not accept of it, on condition of fetching it. I say the same of spent ashes. To manure a field of ten acres, in this way, a man and two horses must be employed twenty days at least, with twenty days wear and tear of wagon and tackle. Two oxen and two men do the business in two days, if the manure be on the spot.

156. In concluding my remarks on the subject of Ruta Baga, I have to apologize for the desultory manner in which I have treated the matter; but, I have put the thoughts down as they occurred to me, without much time for arrangement, wishing very much to get this first part in the hands of the public before the arrival of the time for the sowing of Ruta Baga this present year. In the succeeding parts of the work, I propose to treat of the culture of every other plant that I have found to be of use upon a farm; and also to speak fully of the *sorts* of cattle, sheep, and hogs, particularly the latter. My experiments are now going on; and, I shall only have to communicate the result, which I shall do very faithfully, and with as much clearness as I am able. In the meanwhile, I shall be glad to afford an opportunity, to any persons who may think it worth while to come to Hyde Park, of *seeing* how I proceed. I have just now (17th April) planted out my Ruta Baga, Cabbages, Mangle Wurzle, Onions, Parsnips, &c. for seed. I shall begin my *earth burning* in about fifteen days. In short, being convinced, that I am able to communicate very valuable experiments; and not knowing how short, or how long, my stay in America may be, I wish very

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much to leave behind me whatever of good I am able, in return for the protection, which America has afforded me against the fangs of the Borough-mongers of England; to which country, however, I always bear affection, which I cannot feel towards any other in the same degree, and the prosperity and honour of which I shall, I hope, never cease to prefer before the gratification of all private pleasures and emoluments.

End of the Treatise on Ruta Baga and of PART I.

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